Collective dominance and oligopoly control in European competition law: Dealing with persistent oligopoly in markets such as telecommunications

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A thesis submitted for the degree of Doctor of Philosophy at Monash University in 2016 and amended in 2017 in response to examiners’ comments and corrections

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Abstract

This thesis is a study of the development of the law relating to collective dominance and other means of regulating oligopolies where competition may be ineffective or weak. It examines the approaches adopted to regulate anti-competitive arrangements in the context of oligopolies; and the way in which courts have inferred ‘intentionality’ in relation to cooperation and collusion, and distinguished this from conscious parallel behaviour that may otherwise develop in oligopolistic markets.

The thesis focuses on the development of the concept of collective dominance in the European Union, based on Article 102 of the European Union Treaty. In the European Union the relevant case law is more extensive than elsewhere and has not been constrained by the criminal law settings that apply, for example, to antitrust law in the United States.

The telecommunications sector has been selected as a case study to illustrate the application of collective dominance law and policy because it is a sector characterised by persistent oligopoly. In addition, it is a sector that is fundamentally important as a driving force for the development of the online society and online economy that increasingly define the way transactions are conducted.

The thesis examines the development of both the economic literature and the case law on collective dominance in Europe before and after the seminal Airtours case of 2002, and also examines more recent developments that suggest a movement away from reliance on collective dominance law for oligopoly regulation and control. A specific variant of this recent development in the telecommunications sector in the European Union is examined.

The thesis concludes that the development of the concept of collective dominance has involved adherence as far as possible to the explicit agreement paradigm, with retention of the central notion of intentionality, albeit in an increasingly attenuated form. Although collective dominance is a structural concept it became conflated with the behavioural concept of tacit collusion from an early date and has remained so since. The courts have failed to effectively address the economic perspective on collective dominance, which is concerned with outcomes not with the intentionality of the competitors involved.
The research has explored the limits of collective dominance and tacit collusion as useful means by which regulators might intervene for ex ante regulation in oligopolistic markets, and has concluded that these concepts can no longer be relied upon for their intended regulatory purposes and that regulatory and legislative means will likely be required for effective oligopoly control.
Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

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Date:  30th October 2016
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Chapter 1: Introduction

The oligopoly problem

This thesis is concerned with attempts by legislatures and the courts to deal with the oligopoly problem, one of the most enduring problems of competition law. The problem arises in certain markets with few sellers, where the participating providers appear to have adopted a common policy in relation to serving the market without effectively competing with each other. The competitors’ behaviour may be to adopt a course of consciously paralleling each other in terms of price or some other critical dimension relevant to competition. Whether conscious parallel behaviour, such as charging the prices already charged by one or more other competitors, is to be legally sanctioned is an important question. Equally important are questions about the additional circumstances that might need to be present, over and above parallel behaviour, to justify regulatory or judicial intervention. At what point, for example, might it be possibly to say that a common policy is in place and that the competitors are behaving in the market in a cooperative manner rather than on a purely individual basis? These questions are explored in this thesis.

The word ‘common’ in the phrase ‘common policy’ used above means no more than that the providers have, as an objective matter, adopted the same policy. It is a policy that they have in common. As discussed below, how the policy came to be adopted is important for determining whether it is unlawful per se, and for justifying other bases of intervention by courts and regulators.

In 1964 George Stigler formulated the oligopoly problem as the disconnection between the hypothesis, which he accepted, that oligopolists wish to collude to maximise joint profits, with the fact that collusion is impossible for many firms and is “much more effective in some circumstances than in others”. The problem for Stigler was why some oligopolies resulted in collusion with non-competitive outcomes and others did not. He accepted that all oligopolies had the potential to become collusive, given that all oligopolists would collude under the right conditions, to maximise joint profits. The further problem is how oligopoly markets are to be analysed to determine which have greater potential, or even some certainty, to become collusive and anti-competitive and,

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as a result, justify ex-ante intervention by sectoral regulators or ex post intervention by competition authorities.

In 2011 Craig Callery stated that “[o]ligopoly is an intermediate market structure, between the two extremes of monopoly and perfect competition”. Callery went on to say that “oligopolies are inherently unpredictable, whereby anything can happen”. Certainly oligopolies can range between effectively competitive and non-competitive, but whether there are any characteristics of such markets that assist in analysing towards which end of this scale they might be, has been the enquiry of academics and the courts over many decades. The attempts to better predict outcomes, and to identify behaviour which is anti-competitive or an abuse of market position is the subject of this thesis.

Is there a problem to be solved?

The short answer is, yes, there is a problem with oligopoly and it needs to be addressed.

The fact that “anything can happen,” as Callery noted, is the problem. There can be effective competition between participants in oligopoly markets. At least some of the participants may be able to develop optimum scale and scope to develop very efficient cost structures from which to fund research and development and investment in innovation – leading to future welfare benefits – and also price reductions for consumers. The benefits of scale and scope might be lost or largely reduced in markets with high participation rates. But in some oligopoly markets there will be incentives for the relatively few participants to adopt more cooperative approaches, at the expense of competition, resulting in less than effective competition. Sub-optimal competition might show in terms of reduced capacity, reduced investment, and prices being maintained above a competitive level for extended periods.

The problem is that we want to preserve the benefits of competitive oligopoly markets but take action to redress the outcomes in non-competitive oligopoly markets, and we need methodologies that can determine on a reliable basis which type of market we are dealing with.

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3 Ibid

4 Ibid
This issue will be further examined in Chapter 3.

**Conscious parallelism**

The law in the United States and elsewhere has traditionally been concerned to prohibit any agreement between competitors to manage a market. Since 1890 the law in the United States has proscribed such an agreement as a “contract, combination or conspiracy” in restraint of trade.\(^5\) But the notion of agreement, although it may be stretched to include understandings and arrangements arrived at without written communications, does not extend to individual actions by a competitor taken to maximise its commercial benefit in response to market opportunities and circumstances. The question is under what circumstances, if any, individual action, such as conscious decisions to follow the price or other behaviour of leading firms, should be considered to be anti-competitive and warrant regulatory or judicial intervention. Implicit in this question is the further question whether the action is truly individual or whether it is of a collective nature in support of a common objective shared with others.

In 1954 the United States Supreme Court held that individual refusal by film distributors to provide first-run films to the plaintiff, where each refusal was in the commercial interests of the distributor concerned, was not a conspiracy.\(^6\) Clark, J, on behalf of the Court, stated that “… this Court has never held that proof of parallel business behaviour conclusively establishes agreement or, phrased differently, that such behaviour itself constitutes a Sherman Act offense.”\(^7\)

In 1962 Donald Turner, reflecting on the *Theatre Enterprises Case*, noted that “[t]he point is that conscious parallelism is never meaningful by itself, but always assumes whatever significance it might have from additional facts. Thus, conscious parallelism is not even evidence of agreement unless there are some other facts indicating that the decisions of the alleged conspirators were interdependent, that the decisions were consistent with the individual self-interest of those concerned only if they all decided the same way.”\(^8\)

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\(^5\) *Sherman Act, (1890) 26 Stat. 209 (US), s. 1*

\(^6\) *Theatre Enterprises v Paramount Film Distribution Corporation (1954) 346 U.S. 537*

\(^7\) Ibid, 540-1

Tacit collusion and collective dominance

This thesis examines the development of responses to the oligopoly problem and the increasing use of the concept of tacit collusion (in the absence of actual agreement or proven collusion) to describe the circumstances and the “additional facts”, to use Turner’s phrase, that might be sufficient to warrant regulatory or judicial intervention to address conscious parallelism. In particular this thesis is concerned with the development of the notion of collective dominance in European Union jurisprudence and linkage of that concept with the concept of tacit collusion. My concern is to examine how far the courts and academic writers have moved from a notion built on agreement or understanding as the basis for prohibiting behaviour of competitors to a notion based on objective criteria removed from subjective intent. In addition I will examine recent legal literature that proposes alternative approaches, and particularly approaches to the issue that would extend the justification for regulatory and judicial intervention based on objective criteria and actual or likely effects of market structure, even in the absence of tacit collusion.

Developments in Europe

In this thesis I will concentrate on the development of the collective dominance concept in Europe, with special attention to industries where oligopoly persists, of which telecommunications is an outstanding example. I will demonstrate that many of the issues associated with collective dominance remain unresolved through case law. I will show that some important issues have not been adequately addressed, even though some progress has been made in clarifying the criteria that must be satisfied before a finding of collective dominance can be sustained. I will conclude that patterning issues associated with oligopoly markets and collective dominance on the model of explicit collusion is likely to leave many of the situations in which the oligopoly problem arises inadequately addressed and that a better approach would have been to cast the problems in terms that can be addressed through objective criteria associated with actual or likely effects, rather than through the problematic issues of actual, assumed or deemed intent. There is nothing radical in this approach because, in practice, it is often what courts are doing when they try these cases. The language of the judgments in many of the cases that will be cited might seem to emphasise common intent and purpose, but in practice such language can be formulaic since intention in these circumstances is a construct and not established by direct evidence.
The question arises as to why the European Union law on collective dominance merits particular study compared to, for example, the law in the United States or Australia? The law relating to collusion and competitor cooperation in the United States and Australia has clearly developed over the past 40 years but the existence of Article 102 (and its predecessor provisions) in the European Union Treaty (TFEU)\(^9\) has enabled the European courts and regulators to develop through the resolution and review of cases and, at the European Commission level, the refinement of policy, a civil jurisprudence on the matter that has not been matched elsewhere. Furthermore, the growth in recent years of the European Union as a confederation of 28 member states with a stated goal of creating a common or single market for all goods and services, without national or other artificial barriers,\(^10\) has meant that the progress in the development of law and policy has needed to be well documented in multiple languages to ensure as far as possible uniformity of understanding and of implementation across the Union. It is therefore unsurprising that the concept of collective dominance has been developed much further in the European Union than in other jurisdictions.

**Chapter structure**

Chapter 2 provides a conceptual framework to deal with many of the key concepts that are necessary for an appreciation of the way in which the law considers competition, markets, single and collective dominance, anti-competitive behaviour, the areas in which per se prohibitions have arisen and the areas in which a conditional approach has been adopted. The discussion in Chapter 2 indicates that many of these concepts are unclear or of uncertain scope, have latent ambiguities, and are often applied ambiguously, all of which makes analysis using these concepts problematic as the justification for market intervention.

Chapter 3 discusses the approach that economics takes to the identification and management of monopoly and oligopoly. This chapter describes in greater detail the oligopoly problem that is central to many of the issues and solutions adopted by the courts and by academic writers. The Chapter will suggest that there is not one but a

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9 The Treaty on the Functioning of the European Union (Consolidation, *Official Journal of the EU* 30.2.2010, C83/47) [TFEU]

10 Ibid, Preamble: “RECOGNISING that the removal of existing obstacles calls for concerted action in order to guarantee steady expansion, balanced trade and fair competition”; “ANXIOUS to strengthen the unity of their economies and to ensure their harmonious development by reducing the differences existing between the various regions and the backwardness of the less favoured regions;” and “DESIRING to contribute, by means of a common commercial policy, to the progressive abolition of restrictions on international trade”.

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range of different problems, depending on the circumstances, and that there are problems with the ideal of perfect competition which has been adopted by some as the implicit standard against which to assess solutions.

Chapter 4 discusses the broad approach of the law to the issues raised by collective dominance and by cooperation that occurs without formal agreement or communication. The chapter examines the notion that in addressing the issues associated with tacit collusion the law adopted the same framework that applies to explicit agreements, including the central notion of intentionality. Chapter 4 includes developments in the United States, but not exclusively so, and the two succeeding chapters address the development of collective dominance as a means of addressing oligopoly regulation in the European Union.

Chapter 5 examines the development of the collective dominance concept in Europe before the *Airtours Case*. The examination has been conducted based on European case law and major academic literature on the issues. In particular the chapter traces the development of the notion of lawful parallel conduct in a market and the reduced scope that the development of the law leaves for such a concept. It is noted that before the *Airtours Case* there had been substantial inroads into the notion.

Chapter 6 contains a detailed analysis of the *Airtours Case*, which has been regarded as seminal in relation to collective dominance in the European Union, and of the development of collective dominance in Europe after the *Airtours Case*. In particular this chapter will examine the emergence, both before and after *Airtours*, of approaches to oligopolistic control where the incentives for collusion or for the pursuit of a common objective may not be present to a standard that might be implied in *Airtours*.

Chapter 7 contains an analysis of the nature of telecommunications markets and of the approaches of the courts and regulators to collective dominance in telecommunications markets following *Airtours*. The persistence of oligopoly in the telecommunications market makes it useful as a case study. The chapter concludes that, despite the limited numbers of operators found in typical telecommunications markets, the notion of collective dominance has not been used widely to address competition issues in telecommunications markets in Europe, and that even where, in some of the cases

examined, the national regulators have concluded in favour of collective dominance, it has only been a conclusion for a limited purpose and for a limited time.

Chapter 8 examines the issues for conscious parallelism and collective dominance that are left essentially unresolved after Airtours and cases such as Impala\(^\text{12}\) and Sony.\(^\text{13}\) In addition the chapter resumes the analysis of more objective approaches to parallel behaviour in oligopolistic markets that do not rely on collective dominance or on actual or implied intent on the part of the relevant market participants. In particular, the chapter examines the recent work of Filippelli\(^\text{14}\) on the matter and the even more recent initiative by BEREC\(^\text{15}\) to plot a course for tight oligopoly regulation as a means of addressing non-competitive outcomes separate to collective dominance in telecommunications markets.\(^\text{16}\)

Chapter 9 summarises the current situation relating to oligopoly control and the regulation of cooperative behaviour, such as parallel behaviour, through the prism of collective dominance. Chapter 9 proposes a solution to the problems raised for the regulation of collective dominance and of oligopolistic non-competitive outcomes in telecommunications markets in the form of a framework with clearly stated criteria capable of predictable interpretation and application. The regulatory framework will need to distinguish between ex-ante regulation and ex post application of competition law. This will take the form of considering other approaches such as those of Filippelli and of BEREC, where a more objective approach, which does not try to establish some level of formulaic, assumed, or imputed intent, may be adopted. In the telecommunications sector a greater reliance on ex-ante regulation with the prospect of structural remedies being imposed is a solution but one that raises consequential issues associated with institutionalising regulation that was intended to be transient. More importantly, the imposition of regulation to facilitate competition in fast developing, high technology industries, such as telecommunications, creates substantial risks of creating legacy regimes that may distort and retard that development. Recognising and reducing such risks, it will be argued, must be part of any solution.


\(^{13}\) Bertelsmann AG and Sony Corporation of America v Independent Music Publishers and Labels Association (Impala) [2008] E.C.R. I-04951


\(^{15}\) Board of European Regulators of Electronic Communications

The thesis has been prepared at an interesting time in the development of collective dominance as a means of imposing oligopoly regulatory control in Europe. The thesis concludes that collective dominance as an effective approach to oligopoly regulation reached its apogee in Europe at around the time when the Airtours case was decided in 2002. That case was accepted as the authoritative and complete statement on the law relating to collective dominance, and as the case that established the evidentiary standards that needed to be met before regulators or the courts could justifiably conclude that a market was characterised by collective dominance.

However, as the examination in Chapter 7 of cases that arose in the telecommunications industry between then and 2009 shows, the evidentiary standard was pitched high with the result that collective dominance, as conceived in that Airtours and those cases, ceased to be an adequate means of addressing those oligopolistic markets where competition was weak or sub-optimal.

The problem of oligopolistic control has not disappeared. In the case of telecommunications markets persistent oligopoly is a problem. In fact, with the dramatic transfer of economic and social transactions to online settings over the past twenty years, it could be argued that the telecommunications sector has become far more important as a fundamental or enabling sector for the rest of the economy and as a critical means of gaining access to all dimensions of society.

The thesis outlines a number of features of the approach to collective dominance that are problematic as a means of oligopoly control. The thesis builds on the existing literature in examining moves away from collective dominance as the major means for oligopoly control. These include approaches that rely less on intentionality and stress the objective nature of the circumstances that justify regulatory intervention. BEREC has initiated a search for alternative bases of oligopoly regulation in the telecommunications industry. That initiative is described. It has not yet run its course, but has already raised issues and problems. It seems reasonably clear that the fundamental issues are not going to be addressed by further reliance on judicial development working with interpretations and reinterpretations of Article 102 of the TFEU. Future progress is likely to rely on innovative legislation by the European Union legislators.

As this thesis shows, drawing distinctions between competitor behaviour on oligopoly settings that is considered to be compatible with effective and sustainable competition,
and behaviour that is cooperative or collusive to the extent that it cannot be accepted, is not amenable to bright line or per se rules. Detailed analysis of the circumstances of each market that is under consideration is required, leading to less certainty than competitors and investors in markets would like. A key contribution of this thesis to the literature is an affirmation that this requirement for detailed analysis of the factual circumstances of each market will need to continue. The thesis also concludes that the need for effective regulatory remedies, notwithstanding intensive legal and economic analysis over many years, remains more, rather than less, acute, especially in the case of critical sectors such as telecommunications.
Chapter 2: Conceptual framework for collective dominance and tacit collusion

Introduction

This thesis is about attempts by courts and regulators to appropriately regulate oligopolistic markets, and in telecommunications markets in particular, and examining the issues that have arisen in the course of attempts to determine which oligopolistic markets are operating in an effectively competitive manner and which not. The thesis is concerned with the circumstances in which intervention by the courts and regulators might be justified to address problems for competition that might arise as a result of the structure of markets, particularly those with few competitors. The conceptual framework within which analysis occurs is therefore critically important so that connections and distinctions between concepts can be made on a consistent and predictable basis.

Set out below are discussions of critical concepts, starting with the meaning and role of competition and competition policy. The concepts are examined individually, but with the recognition that they are part of a total framework and therefore are coloured by association with other concepts in that framework.

This chapter has a limited objective and that is to discuss and analyse a number of concepts that recur in the thesis. However, some of the central concepts such as, for example, common policy, effective competition and collusion, are not static throughout the period of development by the courts, regulators and academic writers described in this thesis. Without the changing concepts of this kind, policy development would not have been possible.

Competition policy

In 1993 the Hilmer Committee Report into National Competition Policy in Australia noted:

"Competition policy is not about the pursuit of competition *per se*. Rather, it seeks to facilitate effective competition to promote efficiency and economic..."
growth while accommodating situations where competition does not achieve efficiency or conflicts with other social objectives.  

The Hilmer Report adopted as its starting point a basic definition of competition propounded by Dennis, namely the “striving or potential striving of two or more persons against one another for the same or related objects.” Competition is a process, and one that includes not only actual striving between parties, but includes potential striving as well. In this sense, competition covers both contests and contestability.

Competition policy promotes and facilitates the process of competition as a means of enhancing community welfare through economic outcomes such as the optimal allocation and utilisation of resources in an economy. The Hilmer Report noted that “[t]he relationship between competition and community welfare can be considered in terms of the impact of competition on economic efficiency and on other social goals.”

The more recent Harper Review continued this theme about competition policy. The Harper review spelled out in more detail the objectives of competition policy, including that it should “make markets work in the long-term interests of consumers; foster diversity, choice and responsiveness in government services; encourage innovation, entrepreneurship and the entry of new players; promote efficient investment in and use of infrastructure and natural resources; establish competition laws and regulations that bare clear, predictable and reliable; and secure necessary standards of access and equity.”

Other policies might promote fairness or inclusion or the protection of individuals in their roles as consumers and citizens. But the role of competition policy is taken to be firmly focussed on economic efficiency and on settings that will promote aspects of economic efficiency.

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17 National Competition Policy, (Australian Government Publishing Service, Canberra, 1993), xvi (Hilmer Report)
19 Hilmer Report, op.cit., 2
21 Ibid 3
23 Ibid, 7
Competition and economic efficiency

Economic efficiency is concerned with the best use and allocation of resources. There are three types of efficiency that are well identified in the economic literature: productive efficiency, allocative efficiency and dynamic efficiency.

‘Productive efficiency’ concerns the efficiency of processes associated with the conversion of inputs into outputs, and includes scale efficiencies. Arguably it is this type of efficiency that closest approximates the meaning of ‘efficiency’ in everyday discourse. Competition between suppliers of goods and services may occur on many dimensions, but price, and underlying cost, will usually be one of them. Competition serves to keep pressure on costs and therefore on the search for better ways of producing more from less. Productive efficiency is welfare enhancing because it increases total welfare measured in terms of the aggregate of producer and consumer surplus.

‘Allocative efficiency’ refers to the contest for resources which is resolved through the price mechanism in an open market economy. In other words, resources go to the parties who value them most and who are therefore prepared to pay a higher price for them than other users. Allocative efficiency is welfare enhancing because it increases...

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24 “The economic objective of a pro-competitive policy is to maximize consumer economic welfare through efficiency in the use and allocation of scarce resources, and via progressiveness in the development of new productive techniques and new products that put those resources to better use.” Areeda, P A & D F Turner, Antitrust Law Vol. I, (Boston, 1978) 7. To similar effect, “Efficiency means the maximization of the value of total output.” Elzinga, K G, ’The Goals of Antitrust: Other than competition and efficiency, what else counts?’ (1977) 125 University of Pennsylvania Law Review 1191, 1191 Also in Re Queensland Co-operative Milling Association Ltd (1976) 25 F.L.R. 169, 187, (‘QCMA’) the Trade Practices Tribunal noted: “Competition may be valued for many reasons as serving economic, social and political goals. But in identifying the existence of competition in particular industries or markets, we must focus upon its economic role as a device for controlling the disposition of society’s resources.”


26 For the remainder of this thesis I will use the term ‘services’ to mean, in context, ‘goods and services’. In the telecommunications network services markets which are my major concern, the term ‘services’ is better to describe the output provided to retail and wholesale customers.

27 “... the preponderant conclusion of numerous narrowly focused studies has been that X-inefficiency [that is, productive inefficiency] is more likely, or of a greater magnitude, when competitive constraints are weakest.” Scherer (1987), op.cit. 1004.

28 See Motta, M, Competition Policy Theory and Practice (Cambridge University Press, 2004) 45-52. Scherer (1987), opcit.1009 queries whether the linkage is as it is claimed to be. “To sum up, our understanding of the links between antitrust, competition, and static cost efficiency is quite limited. There is reasonably strong statistical evidence that modest scale-economy sacrifices, at both the plant level and in overhead functions, are accepted with increased fragmentation of market structures. There is less systematic evidence that strong competition, in the behavioral sense, stemming either from domestic or foreign sources, puts downward pressure on unit costs, regardless of scale.”
net benefits from welfare, and it is maximised when marginal benefit equals marginal cost.29

‘Dynamic efficiency’ refers to the process by which innovation and improvement is facilitated in economic settings over time.30 In order to compete effectively firms need to create, adapt or apply new productive and transactional processes to give them an advantage. Competition is therefore an important spur for innovation, invention and economic transformation, which in turn increases aggregate welfare.31

Some economic commentators consider that the purpose of competition policy is to increase only one form of economic efficiency, namely allocative efficiency.32 The reason usually given is that the welfare enhancing consequences of other forms of efficiency are ambiguous. It is not part of this thesis to contribute to the settlement of that question and the result does not affect the conclusions reached about the issues associated with collective dominance. It is sufficient to say that the role of competition policy is to promote and facilitate efficiency generally because efficiency is generally welfare maximising.33

One source of efficiency comes from returns to scale or scale economies. Economies of scale exist when the average cost of production decreases as output expands, and that occurs because increases in production spread fixed and common costs over more units of output.34 Scale economies are particularly pronounced in industries where the

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29 Markovits, R S, Matters of Principle (1998, New York University Press). See also Motta, M (2004), op.cit. 40, where he defines allocative inefficiency as the welfare loss have firms with market power price ‘above some competitive level’.

30 Schumpeter, J A, Capitalism, Socialism and Democracy (1942), 83: “The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers’ good, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates…”

31 Scherer (1987), op.cit, 1010 where he calls this form of efficiency ‘dynamic technological efficiency’ and equates it with the dynamic forces identified by Schumpeter. Scherer notes at 1011 that “[m]ore competition stimulates and accelerates innovation within limits, but when competition becomes so intense that any given rival can anticipate appropriating only a small share of the innovation’s benefit, still more competition retards innovation.”

32 Hovenkamp, for example, notes that “[t]he Chicago school model of antitrust policy dictates that allocative efficiency as defined by the market should be the only goal of the antitrust laws”: ‘Antitrust Policy after Chicago’ (1985) 84 Michigan Law Review 213, 215.

33 Areeda P and D Turner, Antitrust Law, Vol. 1 (1978, Boston), 17: “… the concept of economic efficiency is concerned with the ‘maximization’ of consumer welfare, and such welfare includes in fact not only those demands expressed in the market place but also those expressed collectively through laws, social conventions, and government purchases, subsidies and taxes.” Also Hovenkamp, H (1985), op. cit., 226: “A properly defined antitrust policy will attempt to maximize net efficiency gains.”

proportion of fixed and common costs is high relative to total costs.  

Telecommunications is one such industry.  

Scale economies may work to reduce actual or potential competition. If an incumbent firm has achieved near maximum scale, then other actual or potential competing firms must achieve a similar scale to be cost competitive, and this may be impossible if scale economies are present at all levels of demand. In such situations competition will not enhance efficiency as ‘natural monopoly’ conditions will apply. Therefore, if the role of competition policy is to promote and facilitate efficiency in a sustainable way, the characteristics of certain markets, such as those with substantial scale economies, might require that a choice be made between effective competition and maximum efficiency, or to achieve a balance that optimises outcomes for both competition and efficiency.

**Effective and perfect competition**

It is important in considering the nature of structural and behavioural impediments to competition, to consider what competition is like, and the forms that it might take. I have already discussed competition as rivalry between firms all of whom are seeking the same result to the exclusion of the others. However economists and academic commentators have sought at various times to establish a standard or norm for perfect competition, and also for effective competition. Perfect competition is generally considered to prevail in a market in which buyers and sellers are numerous and well informed, and the market prices of goods and services are beyond the control or influence of individual buyers or sellers or any group of buyers or sellers. Various

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35 This is because it takes greater production, reflected in greater market share of overall demand, for the fixed and common costs, which do not move with scale, to be allocated with the least impact on overall unit costs (being variable costs plus a share of fixed and common costs).

36 This applies especially to fixed telecommunications where the customer access network components are not traffic sensitive. The proportion of fixed and common costs for basic carriage capacity may well be increased by the multi-media and multi-service nature of next generation networks and the scale and scope economies will be emphasised further. See Productivity Commission (2001), op. cit., 17, where the Commission notes that “Convergence — in technologies and in the uses of telecommunications networks — has ambiguous effects on the need for competition regulation. It may erode market power in some segments, while maintaining or creating it in others.” See also Chapter 7.

37 Martin Cave, ‘Economic aspects of the new regulatory regime for electronic communications services’ in Buigues, P A and P Rey (Ed) *The Economics of Antitrust and Regulation in Telecommunications: Perspectives for the new European Regulatory Framework* (2004, Edward Elgar, 2004), 14. Cave also notes the requirement to incur substantial sunk costs to achieve the capacity to deliver scale as being a consideration.

38 Train (1991) op.cit., 5


additional characteristics have been added from time to time, but these are the primary characteristics.

It follows that oligopolistic markets with few sellers cannot exhibit perfect competition in this sense. However terms other than ‘perfect competition’ have been adopted to indicate a level of competition in all markets, including oligopolistic markets, that is sufficiently compelling to dissuade regulators and the courts from intervening on the grounds of market failure. The other terms that are used in these circumstances include ‘workable competition’ and ‘effective competition’.

Easterbrook noted in 1984 that “a ‘competitive market’ is not necessarily the one with the most rivalry moment-to-moment. ...the picture of ‘perfect competition’ found in economic texts is a hypothetical construct.” On that view something less than perfect competition would be acceptable and, if it existed, that would be reason enough not to intervene in the operations of the market.

Something less than perfect competition would therefore be realised in markets that are effectively competitive, even if also oligopolistic, and which would “promote economic wellbeing in various ways, including appropriate allocation of resources.”

There is still no settled and generally accepted definition of ‘effective competition’, although the definitions that have been proposed over the years have become progressively more practical and capable of implementation. An early definition, using the initial description of workable competition, was proposed by Markham:

An industry may be judged to be workably competitive when, after the structural characteristics of its market and the dynamic forces that shaped them have been thoroughly examined, there is no clearly indicated change that can be effected through public policy measures that would result in greater social gains than social losses.

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41 Market failure refers to the inability of a market to produce price and other outcomes that would be expected of an effectively competitive market.
43 Blake, H A and W K Jones, ‘In Defense of Antitrust’ (1965) 65 Columbia Law Review 377, 381: “We have no quarrel with the view that effectively competitive markets promote economic well-being by (a) allocating resources to uses for which they are best suited in maximizing consumer satisfactions, (b) encouraging efficiency and progressiveness in the utilization of resources, and (c) minimizing maldistributions of wealth by forestalling sustained exactions of prices unrelated to costs.”
Predictions about the net balance between potential social gains and social losses would likely be difficult to make with any certainty, so the definition is hardly practical. However, even if a conclusion was reached that there were no clear public policy measures available to generate net social gains, the level of competition might be very weak and insufficient for the market to be accepted as being competitive. In other words, the concept that no public policy based intervention might add net welfare gains is insufficiently linked to the concept that the market is workably competitive as a result. What appears to be missing is a minimally defined level of rivalry between the market participants to operate as a metaphorical pulse to indicate that competition actually exists.

A different approach was adopted in 1990 by Brunt when she noted that there is effective competition where “the availability of substitutes, both in demand and supply ... act as constraints on each individual firm’s market power.”45 This definition is more concerned about the absence of market power than the existence of some level of rivalry between the firms in the market.

The Australian Competition Tribunal reviewed the history of the concepts of workable and effective competition in Application by Chime Communications Pty Ltd (No 2) in 2009.46 The Tribunal stated that “[p]erhaps the best shorthand description of workable competition is to envisage a market with a sufficient number of firms (at least four or more), where there is no significant concentration, where all firms are constrained by their rivals from exercising any market power, where pricing is flexible, where barriers to entry and expansion are low, where there is no collusion, and where profit rates reflect risk and efficiency.”47 This definition is comprehensive and contrasts effective competition with markets in which one or more participants exercises market power with relative impunity. Another consequence of the definition, and of its arbitrary requirement for at least four or more participants in the market, is that many markets that have high capital requirements and scale economies, such as telecommunications,

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46 Application by Chime Communications Pty Ltd (No 2), [2009] ACompT 2 (Finkelstein J, R Davey and D Round)
47 Ibid, [37]
may not qualify as effectively competitive no matter how intense the rivalry may seem to be.\textsuperscript{48}

The Tribunal noted that the Australian Competition and Consumer Commission (ACCC) also adopted a view of effective competition that contrasts competition with significant market power.\textsuperscript{49} The ACCC’s approach is that effective competition is not about the threat of competition but requires actual competition in the market; requires that over the long term prices are determined by underlying costs rather than the existence of market power; requires barriers to entry to be sufficiently low for any degree of market power to be transitory; and requires that there be independent rivalry on all dimensions of price and product service.\textsuperscript{50}

Therefore the current preferred approach in Australia appears to be to accept that effective competition is something less than perfect competition and something more than (or at least different from) non-competitive markets characterised by significant market power by one or more participants. To determine whether a market is effectively competitive it is necessary to measure or assess its competitiveness. The Tribunal noted that “[i]f there is a high mark up over marginal cost for a sustained period the market is not effectively competitive”, but noted also the difficulty of establishing the marginal cost of goods or services.\textsuperscript{51}

We can conclude from the Tribunal’s comments that effective competition may be defined in contrast to markets characterised by significant market power. The problem with this conclusion is that there are markets that may not have characteristics to support a conclusion of significant market power, but which one might hesitate to declare to be effective competitive. They might be effectively competitive or they may not be. Such markets include tight oligopolies with very few participants – perhaps two or three. Many telecommunications markets fall within this description.

\textsuperscript{48} As will be further discussed in Chapter 7 some telecommunications markets are unlikely to sustain four competitors. The wholesale markets for telecommunications service in particular typically may have three operators or less.

\textsuperscript{49} Application by Chime Communications Pty Ltd (No 2), op.cit., [39]: “effective competition ... does not preclude one party holding a degree of market power from time to time, but that power should pose no risk to present and future competition.”

\textsuperscript{50} Ibid.

\textsuperscript{51} Ibid, [49]
The position described by the Tribunal is essentially the same as the position in the European Union. In *Hoffman-La Roche*\(^{52}\) the ECJ\(^{53}\) held that the appellant had a dominant position in the market for pharmaceuticals which enabled “it to impede effective competition within the Common Market.”\(^{54}\) Effective competition therefore contrasts with a market characterised by one or more dominant operators.

**Market**

The concept of a market in economics and in competition law is of a sphere or space, although not necessarily a physical sphere or space, in which actual or potential competition for the provision of services takes place. This was explained by the Trade Practices Tribunal in *QCMA*:

> A market is the area of close competition between firms or, putting it a little differently, the field of rivalry between them. ... So a market is the field of actual and potential transactions between buyers and sellers amongst whom there can be strong substitution, at least in the long run.\(^ {55}\)

The market concept is sometimes referred to as an “instrumental concept” designed to assist competition and market power analyses.\(^ {56}\)

Ultimately the scope of a market for these analytical purposes will depend on the limits of substitution, in terms of both demand and supply.\(^ {57}\)

On the demand side, customers determine the extent to which they consider services to be substitutable having regard to a range of factors including function, quality and price. Demand-side substitutability in particular determines whether services are in the same or different markets for analytical purposes. The closer the services in question are in terms of function, quality and price the more likely they are to be regarded as substitutes in the same market, but this may not be clear and will require some judgment based on fundamental economic concepts, such as price elasticity of

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\(^{52}\) *F. Hoffmann-La Roche & Co AG v Commission of the European Communities* [1979] 3 C.M.L.R.211  
\(^{53}\) European Court of Justice  
\(^{54}\) *F. Hoffmann-La Roche & Co AG v Commission of the European Communities* [1979] 3 C.M.L.R.211, 219  
\(^{55}\) *QCMA*, 190  
\(^{56}\) Brunt, M, (1990), op. cit., 93. Also *Queensland Wire Industries v BHP*, (1988-89) 167 C.L.R. 177, 187 where Mason CJ and Wilson J note: “Defining the market and evaluating the degree of power in that market are part of the same process, and it is for the sake of simplicity of analysis that the two are separated.”  
\(^{57}\) Brunt, M (1990)
Price elasticity of demand is a measure of the extent to which demand changes as a result of a change in price, so that if demand increases in response to a reduction in price the demand is said to be elastic. Therefore if there are significant cross elasticities of demand—with the demand for one service increasing as a result of the increase in price of another—there will be evidence of substitution and a case for inclusion of both services in the same market for analytical purposes.

If increases in prices for particular services encourage producers to change their output mix to serve the customers involved, then this is supply substitution. The producers who are able to switch production may therefore be considered to be part of the market and their potential involvement needs to be considered in relation to market power analyses. Some commentators have argued that supply-side substitutability is even more difficult to assess than demand-side substitutability; that many situations are ambiguous; and that potential competition may in fact not “police competition” or provide anything like the constraint that actual and direct competition provides.

In both demand and supply substitution some additional rigour has been sought through the application of the Hypothetical Monopolist Test (sometimes called the Small but Significant Non-transient Increase in Price - or SSNIP - Test). This test is applied by assuming that the services under consideration are supplied by a Hypothetical Monopolist who increases prices by 5 or 10% (a small but significant amount) for a period of a year or more (non-transient, and sufficient time for very short term consumer reactions to settle). If the increase can be accomplished profitably, then the boundaries of substitution have been identified, and no further services need to be considered for market definition and market analysis purposes. However if the Hypothetical Monopolist’s price increase would not be profitable it may be that some substitutions have not been considered and the market boundaries will need to be reviewed to consider whether other substitute services should be regarded as part of

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58 QCMA, 191
59 Motta (2004), 533
60 Scherer, F M, *Industrial Market Structure and Economic Performance*, 2nd ed., (Chicago, Rand-McNally, 1970), 61: “... we should probably draw the line to include as substitutes on the production side only existing capacity that can be shifted in the short run, i.e., without significant new investment in plant, equipment, and worker training.”
the market. Alternative sources of supply might come on line to serve the customers affected by the price increase, and they will also need to be considered.

These forms of analyses require significant amounts of data on production costs and price elasticities of demand – data that is usually difficult and tedious to assemble. In particular, reliable data on price elasticities may be difficult to obtain without substantial data on individual responses to price increases over periods of a year or more. As a result, the applications of the Hypothetical Monopolist Test for determining market definition and the boundaries of substitutability are often considered to be “thought experiments” rather than practical methodologies.  

**Market dimensions**

Courts and regulators also consider markets in terms of the critical descriptive dimensions that might apply. Typically these will be in terms of services, customers and geography. Ultimately whether different services or different customer segments or different geographical locations are considered to be in the same market depends on substitution reflected in the behaviour of users, rather than on a direct assessment of the physical or other characteristics of the services in question.

**Determinants of market power**

It is important to distinguish the concepts of having or possessing market power (or being in a position of market power) from exercising market power. The former essentially relates to a position based on market structure, whilst the latter relates to market behaviour. Market structure is not disconnected from market behaviour, but it is conceptually distinct. Market structure is an important determinant of market

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64 This is particularly the case in defining telecommunications markets, where the services need to be identified in terms of characteristics for practical purposes, the customers might be residential or business or retail and wholesale, and the geography might be national or local depending on the limits of substitutability on all of these dimensions. An example of a market analysis in these terms may be found on the website of the Saudi regulator, the Commission for Information Technology and Communications at [http://www.citc.gov.sa/English/Reportsandstudies/Reports/MarketReport/PL-SP-316-E-Market_Definition_Designation_and_Dominance_Report.pdf](http://www.citc.gov.sa/English/Reportsandstudies/Reports/MarketReport/PL-SP-316-E-Market_Definition_Designation_and_Dominance_Report.pdf).

65 “…if the evidence is that customers think that two products are close substitutes (at going price relativities), and are prepared to act on this, then they are.” Brunt, M (1990), 94
behaviour.\textsuperscript{66} It determines the circumstances in which behaviour occurs and will shape the opportunities reasonably open to competitors.

Market power is not behaviour. Rather, it is a position in a market and related to the structure of a market.\textsuperscript{67} That position gives rise to an ability to act, possibly without undue constraint by or concern for the responses of a firm’s competitors or customers, and so may be antithetical to competition.\textsuperscript{68} Specifically, a firm with significant market power, or which is dominant in a market, may increase prices or reduce output with relative impunity because its competitors are either non-existent or weak and its customers have no or limited choices available to them.\textsuperscript{69}

In analysing whether a firm is dominant in a market—and has a position of economic strength in the market— one needs to examine the sources of constraint on the firm’s behaviour. These are to be found in the level of competition within the market and in the barriers to entry to the market.\textsuperscript{70} A barrier to entry, in economic terms, ‘may be defined as a cost of producing (at some or every rate of output) which must be borne by firms which seek to enter an industry but is not borne by firms already in the industry.’\textsuperscript{71}

The structure of the market will generally determine whether a firm (or firms) can be said to have market power – that is, a position of economic strength in a market.\textsuperscript{72} Market share, calculated in terms of revenues or other suitable measures, is taken to be an important indicator, but it must be assessed with some caution. There is no

\begin{itemize}
\item[\textsuperscript{66}] Weiss, L W, ‘The Structure-Conduct-Performance Paradigm and Antitrust’ (1979) 127 University of Pennsylvania Law Review 1104, 1106. Weiss is concerned to show that high prices (behaviour) results from oligopolistic collusion, whether explicit or tacit, and from the demand curve of the singly or jointly dominant competitors in a concentrated market.
\item[\textsuperscript{67}] Brunt, M (1990), 93: “Thus market power rests upon those key features of what economists term ‘market structure’.”
\item[\textsuperscript{68}] Ibid, 93: “… the essence of market power is ‘discretionary power’.” Also, Article 14.2 of the EU Framework Directive (Directive 2002/21/EC) specifies: “An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.”
\item[\textsuperscript{70}] Brunt, M. (1990), 93
\item[\textsuperscript{71}] Stigler, G J, The Organization of Industry, (Homewood, Ill, Richard D Irwin, 1968) 67. But see Bain, J S, Industrial Organization (2nd ed., New York, John Wiley & Sons, 1968), 252: “...the extent to which, in the long run, established firms can elevate their selling price above minimum average costs of production and distribution ....without inducing potential entrants to enter the industry.”
\item[\textsuperscript{72}] This is the generally accepted view, namely that the structure of a market, including the patterns of demand, the number of participants and their share of the demand, will provide more or less restraint on the potential for the competitors to behave in certain ways. See, for example, J S Bain, “Structure versus Conduct as Indicators of Market Performance: The Chicago School Revisited, (1986) 18 Antitrust law & Economics Review, 17, 33 where Bain notes that others – and specifically the Chicago School, have a different view of the relationship between market structure and market performance. Their view, according to Bain, is a “negation of the dominant importance of market structures”.
\end{itemize}
threshold figure of percentage for market share that is indicative of power in all markets.73 Nor, despite administrative convenience in some national laws, is there a threshold above which the existence of market power might be readily assumed, or below which it might be safely ignored.74 Market share is the result of many influences, and these might usefully be considered in terms of market power and its possible continuation.75 Market share is seldom the result of a single unambiguous factor, however.

Market share alone is not always useful for analysing market power. The concentration of the industry and the relative market shares of other market participants to the market share of a possibly dominant firm are important. The market power of a firm with a 45% market share in an industry with many smaller participants, all with market shares less than 5%, may very well be quite different from that of a firm with 45% market share in a market with only three firms.

The analysis of barriers to entry and how they might play out in a specific industry requires sector-specific examination. In the case of telecommunications, Cave has classified legal, regulatory, scale-related and strategic barriers to entry, but only considers that legal, regulatory and scale-related barriers justify ex-ante regulation for dominance.76 This issue will be dealt with at greater length in Chapters 3 and 7. Cave bases his conclusion on the persistence of the barriers involved. According to Cave, the impact of strategic barriers – which may include excessive investment in production capacity, research or advertising – may be “idiosyncratic and episodic”.77 For economies of scale to operate as entry barriers they must be large in relation to the market demand as a whole and be present at every level of demand, so that market exit will be costly because the entrant will have incurred substantial sunk costs that are not recoverable.78

73 F. Hoffmann-La Roche & Co. AG v Commission of the European Communities [1979] 3 C.M.L.R. 211, 275: “A substantial market share as evidence of the existence of a dominant position is not a constant factor and its importance varies from market to market according to the structure of those markets…”
74 Even where a threshold share is mentioned it is often a preliminary figure subject to amendment in the circumstances of a relevant market, as in the example of the Telecom Act of Saudi Arabia (pursuant to the Royal Decree No. (M/12) dated 12/03/1422H (corresponding to 03/06/2001)) which at Article 1 defines Dominant Operator as “the operator whose service covers at least 40% of specific telecommunications market in the Kingdom, unless the Commission decides to change this share according to the market situation”.
75 Hoffman-La Roche, 276: “… this [retention of market shares] may just as well result from effective competitive behaviour as from a position which ensures that Roche can behave independently of competitors…” The same may be said of gaining market share in the first place.
76 Cave (2004), 33-5
77 Ibid 35
78 Ibid 34
Legal concepts of market power

Legislation typically establishes the concept of significant market power as equivalent to economic ‘dominance’. For example in the Framework Directive the European Union has converted the economic definition of market power into legislative form where it specifies in Article 14.2:79

An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers.

The linkage has become complete with the adoption of economic concepts of market power by the courts.

Market power and monopoly

A position of market power may be held by a single firm, as in the case of a monopoly or, if there are competitors, where competition is weak or ineffective. As noted earlier, effective competition may be taken to preclude dominance and significant market power, so that if a market is effectively competitive, it is inappropriate to say that one or more firms in the market have significant market power or is dominant.80

A single firm may be in a position of dominance in a market without taking any action designed or intended to create, maintain or extend that position. For example, the firm may have acquired a level of dominance entirely on the merits of its products and services, and because of the value that customers in that market attribute to product and service factors that are important to them, such as quality, cost, reliability, and so on. As discussed in Chapter 4, there is nothing unlawful per se for a firm to be in a position of significant market power.

80 But dominance or significant market power is quite consistent with some competition. Hoffman-La Roche, 274. The reverse is not necessarily true, however. As will be discussed in later chapters it may be that an oligopolistic market may not be considered to be effectively competitive, even though three conditions for single or collective dominance have not been established.
Oligopoly

An oligopoly is a market in which there are few sellers.\(^{81}\) The term has come to mean more than this, and often is used to denote a situation where non-competitive outcomes are achieved through the individual actions of a small number of interdependent firms. Hay, for example, notes that “[t]he traditional economic analysis of oligopoly … portrays the process of achieving non-competitive ends as involving separate, albeit interdependent, decisions by each firm.”\(^{82}\) In this way the strict meaning of oligopoly has become coloured by the potential for cooperative conduct.

Problems posed by oligopolies

In oligopolistic markets, as in most markets, it will be rational for any firm to take account of the likely responses of its competitors when assessing the probable commercial outcomes of any planned price, promotion, new product launch, or other initiative. The result of taking account of likely responses might well be a more cautious approach to the market with reduced levels of competition, which may occur if the firm decides not to provoke competitive responses but to opt for a less rivalrous path. This may result in what Areeda calls ‘tacit cooperation’:\(^{83}\) Where this process leads one firm to follow another in a concentrated market, for example on pricing, it has been called ‘conscious parallelism’ and ‘tacit collusion’:\(^{84}\) The term ‘tacit collusion’, and how it may be distinguished from ‘conscious parallelism’, is discussed further later in this chapter and in Chapter 3. In short, however, the term ‘tacit collusion’ has been used to cover other types of market behaviour as well, such as cooperation where a common purpose is not arrived at after direct oral or written communications between the firms involved, but has been established through repeated behavioural sequences associated with bidding, price advertising, and so on.\(^{85}\)

\(^{81}\) From ὀλίγος (olígos), meaning “few”, and πωλεῖν (polein), meaning “to sell”
\(^{84}\) A number of terms are set out as meaning essentially the same in Noble, M, ‘Facilitating practices: Innocuous, Illegal or Somewhere in between?’ (2010) 17 Competition & Consumer Law Journal 276, 277: “… ‘coordinated conduct’ (or ‘conscious parallelism’, ‘oligopolistic interdependence’ or ‘tacit collusion’, depending on the term adopted)...” Noble notes at 277 that “[w]hile a range of differing terms are used to describe the oligopoly problem, there is no universally accepted term and there are different approaches to use of these terms and the contexts in which they are used.”
\(^{85}\) Martin, S, ‘Competition policy, collusion, and tacit collusion’ (2006) 24 International Journal of Industrial Organization 1299, 1299: “… industrial economists have modelled collusion on the non-cooperative equilibrium of a repeated game.” He notes that this differs from the legal concept of collusion which requires that firms agree. (1299-1300).
Although there is general agreement in the literature and the case law that conscious parallelism alone is not unlawful and should not be unlawful, in contrast with overt collusion, the problem remains that the results are often the same or similar in economic terms as if there had been an anticompetitive agreement. If the policy objective is the improvement of consumer welfare through competition, then, despite its being rational, prudent and understandable, conscious parallelism creates a problem. It particularly creates a problem in the circumstances of oligopolistic markets where parallel behaviour may need to be addressed if the policy objective is to be achieved.

An alternative view is that a cautious intervention strategy is appropriate because the interests of the firms in an oligopolistic market will not be served indefinitely by parallel behaviour. Another way of describing this is that price and other equilibria are temporary and that competitive markets are typically characterised by periods of competition followed by periods of relative quiet and consolidation. Periods of relative quiet and consolidation may cease when one or other of the firms in the market innovates in terms of service or process and gains what it considers to be a significant competitive advantage. This can occur in any sector of the economy but may be more likely and more often in high technology sectors such as telecommunications.

Collusive behaviour

In the case of two or more firms, with a potential to compete with each other for revenues in a market, the maintenance of a position of collective dominance through agreement is unlawful and therefore prohibited. For example, §1 of the U.S. Sherman Act.

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86 For example, Areeda PA: Antitrust Law, Vol. VI, op.cit., “... mere interdependent parallelism has not been held to constitute an agreement...” Also Wood Pulp II (Ahlström Osakeyhito v Commission [1993] ECR 1-1307, [70]
87 In Wood Pulp II, (Ahlström Osakeyhito v Commission [1993] ECR 1-1307, [70]: “... parallel conduct cannot be regarded as furnishing proof of concertation unless concertation constitutes the only plausible explanation for such conduct. It is necessary to bear in mind that although Article [81(1)] of the Treaty prohibits any form of collusion which distorts competition, it does not deprive economic operators of the right to adapt themselves intelligently to the existing and anticipated conduct of their competitors.” Essentially this remains the position today.
88 Callery, C, ‘Considering the oligopoly problem’ (2011) 32(3) European Competition Law Review 142, 142: “Put simply, oligopolies are inherently unpredictable, whereby ‘anything can happen’.” However what typically happens is that the circumstances that may have sustained robust competition or quiescence change, and the circumstances and perceptions of self-interest diverge. Precisely when this might occur is probably best described as generally “unpredictable”.
89 This is because technological innovation is constantly leading to change in the capacity of systems in telecommunications, and therefore changing unit costs and cost structures. These factors affect competitive advantage and competitive relationships, and encourage greater demand, which in turn feeds technological research and innovation. A useful but incomplete list of such changes in the recent history of telecommunications is set out in Ordover, J, Effective Telecommunications Service Competition in Australia and the Need for Regulatory Reform, (2000) Melbourne, submission to Australian Productivity Commission (www.pc.gov.au/inquiry/telecommunications/index.html), 45-6.
Act provides that “[e]very contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal.” Section 2 of the Sherman Act further provides that “[e]very person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony...”

In the European Union, the Treaty provides in Article 101.1 that “[t]he following shall be prohibited as incompatible with the internal market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market...” Article 102 further provides that “[a]ny abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States.”

Agreements of the kind contemplated are called ‘horizontal agreements” because they are between firms or undertakings that are at the same level in the supply chain in a market. In this they contrast with agreements between a firm and its suppliers or a firm and its customers. The latter are usually referred to as ‘vertical agreements’. The agreements in question need not be formal or in writing. From the viewpoint of economic outcome it does not matter whether such agreements are in writing or not. The existence of an agreement is a matter to be decided on the evidence and the inferences that may reasonably be drawn from the evidence.

An actual agreement might sometimes be inferred from behaviour, in the absence of written or oral communication. Signalling in various forms might make up a further

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90 26 Stat. 209 (1890)
91 Ibid.
92 The Treaty on the Functioning of the European Union (Consolidation, Official Journal of the EU 30.2.2010, C83/47)
93 Motta (2004), 32
94 Article 101.2, EC TFEU
95 Ibid, Article 101, by implication.
form of communication that needs to be considered, because communication leading to agreements and understandings need not be through the use of language.\footnote{For example, game theory suggests that the feedback from earlier transactions in a repeated transactions situation provides information to assist in arriving at a common outcome later in the game. Transactions are in effect non-linguistic signalling enabling a result that is mutually acceptable to emerge in successive transactions. See experimental evidence in M. Stenborg, “Forest for the Trees: Economics of Joint Dominance”, (2004) 18 European Journal of Law, 365, 377-9. Stenborg concludes that “the literature on economic experiments does not seem to support the presumption that collusion is easy without communicating.” (379)}

**Conscious parallelism**

The above are collusive behaviours that result in an agreement or understanding. However in any market, but especially in concentrated oligopolistic markets, it is rational for firms to consider the likely response of customers and competitors to price and quality changes. A firm would need to decide if these responses would make its commercial position worse off to the extent of negating the benefit of taking any pricing or other initiative in the first place. The resultant behaviour would be the unilateral behaviour of the firm in question, and not behaviour that is coordinated with the behaviour or others or the result of pursuing a common objective established in some way between the parties. Prior establishment and confirmation of a common objective amongst the parties would seem to require communication of some kind. Alternatively, the firm might take the view that it will follow the behaviour of others in the market, treating this as a safe and sensible course in the absence of full information about how customers and competitors generally will respond to price and quality initiatives. Again, this would be the behaviour of the individual firm, rather than collective or group behaviour, after taking account of all the factors known to it. This is referred to as **conscious parallelism**.\footnote{Viscusi, W K, J E Harrington & J M Vernon, Economics of Regulation and Antitrust (Cambridge, Mass. 4th ed., 2005), 140}

In both of the cases cited above the behaviour has been labelled as interdependent because in both cases an assessment of the behaviour and potential responses of others in the market is an important consideration before the relevant firm takes action.\footnote{Hay, G A, ‘Oligopoly, Shared Monopoly, and Antitrust Law’ (1982) 67 Cornell Law Review 439, 441}

Some writers have conflated the concepts of conscious parallelism and tacit collusion.\footnote{Viscusi et al (2005), 140 Also, Niels, G, ‘Collective dominance: more than just oligopolistic interdependence’ (2001) 22(5) European Competition Law Review 168, 168: “The whole concept of collective dominance is derived from the theory of tacit collusion.” Neils’ conflation is not quite complete.} The latter term suggests that there is collusion of some kind and an effective understanding or agreement, albeit not effected by direct communication of the type
that we would normally associate with achieving agreement. This conflation will be examined further in Chapter 3. For now it is sufficient to note that to equate all consciously parallel behaviour to a form of collusion, and then to prohibit the behaviour in some way, could amount to a requirement that firms in oligopolistic markets should behave in ways that may be neither rational nor commercially justified, and to do so in situations that may be inherently ambiguous. It is unrealistic to expect that firms will not take into account their market circumstances and possible reactions of their competitors before taking action themselves. Insofar as conscious parallelism is rational behaviour designed to maximise the commercial self-interest of firms, it must be accepted if there are no contextual or other factors that are relevant. Of course, acting rationally is not a defence.

Some academic writers and court cases suggest that additional obligations might accompany conscious parallelism in circumstances where the market structure is conducive to collective dominance. There are material risks that outcomes that do not adequately recognise the realities of rational, commercial behaviour in markets would not be likely to serve the objectives of competition policy, and would create a high level of regulatory and legal uncertainty.

Courts have for some time confirmed that something more than merely pursuing their own individual commercial interests is required before firms will be held to be acting in combination, concert or in a conspiracy.

Following Gencor the European Union modified its Framework Directive in 2009 to clarify the fundamental requirements for joint or collective dominance, as follows:

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100 For example, in Filippelli, M, Collective Dominance and Collusion: Parallelism in EU and US Competition Law (Edgar Elgar, London, 2013), 290 where the author considers that the application of objective (non-intent) criteria of the kind developed by economists in Game Theory analysis is required to enable the negative consequences of conscious parallelism to be addressed: “Therefore, the need for enforcing antitrust rules against tacit collusion, even in the case of pure parallelism – that is, absent any proof of conspiracy, meeting of minds, or faulty/intentional conducts – implies the application of ... art. 102 TFEU on a purely objective basis (when there is evidence of conduct generating negative net effects on the competitive market functioning) and the imposition, in this case, of injunctive relief.” The additional obligations are imposed through injunctive relief on this view.

101 Such as in Atlantic Container Line and Others v Commission of the European Communities (T191/98) [2005] 4 C.M.L.R. 20, where the Court at First Instance said: “...in the light of their special responsibility not to allow their conduct to impair competition, the onus is on the dominant undertakings to behave in a way which is proportionate to the objectives they seek to achieve.” [1120]

102 Theatre Enterprises v Paramount Film Distribution Corporation (1954) 346 U.S. 537, 541: “But this Court has never held that proof of parallel business behaviour conclusively established agreement or, phrased differently, that such behaviour itself constitutes a Sherman Act offence. ...but ‘conscious parallelism’ has not yet read conspiracy out of the Sherman Act entirely.”

103 Gencor Ltd v Commission [1999] 4 C.M.L.R. 971
Two or more undertakings can be found to be in a joint dominant position within the meaning of Article 14 if, even in the absence of structural or other links between them, they operate in a market which is characterised by a lack of effective competition and in which no single undertaking has significant market power. In accordance with the applicable Community law and with the case-law of the Court of Justice of the European Communities on joint dominance, this is likely to be the case where the market is concentrated and exhibits a number of appropriate characteristics of which the following may be the most relevant in the context of electronic communications:

- low elasticity of demand,
- similar market shares,
- high legal or economic barriers to entry,
- vertical integration with collective refusal to supply,
- lack of countervailing buyer power,
- lack of potential competition.\(^{104}\)

The Directive does not go so far as to require that the existence of some or all of the factors should result in a conclusion that there is collective dominance, only that their presence adds to the likelihood of collective dominance.

### Regulating market power: ex-ante and ex post approaches

Industry-specific regulation has applied to many industries, including telecommunications, and is applied alongside competition law. The original rationale for telecommunications industry-specific regulation was the need to address the substantial residual power of incumbent former monopolists in the period of transition from monopoly to competition.\(^{105}\) The longer term aim has always been to reduce industry-specific regulation and rely more on economy-wide competition law to regulate competitor behaviour.\(^{106}\) This is consistent with a policy of facilitating competition.\(^{107}\)


\(^{105}\) As an example, Centre for the Study of Regulated Industries, *The UK Model of Utility Regulation*, (2003), *CRI Proceedings 31*, University of Bath, 19: “My view is that the 1983 [Littlechild] report (recommending RPI-X retail; price controls] conveys the message to the reader (at least this reader) that price cap regulation of BT was expected to be a temporary phenomenon that could be dropped after about five years or so.” (Per Jon Stern) Price cap regulation is still in force in many retail markets today.

\(^{106}\) “Hence, the logic of the 1983 [Littlechild] report is that RPI-X could only have been abolished if sufficient competition were to have developed in UK telecoms within the first five years after the privatisation of BT.” Ibid.
Over the past 20 to 30 years this goal has proven to be elusive in many parts of the telecommunications industry, especially in areas such as fixed network services that have been served by technologies with extensive scale economies compared to the level of demand.\textsuperscript{108}

With one significant exception competition law is applied ex post – after the fact – and is directed towards interventions in response to anti-competitive behaviour in the market.\textsuperscript{109} The exception is in relation to mergers and acquisitions, where authorisation regimes are based on assessments of the impact of proposed concentrations on competition before they take place.\textsuperscript{110}

Industry-specific regulation is usually administered by specialised regulators knowledgeable in the relevant industry.\textsuperscript{111} Interventions are ex-ante – before the fact – and are based on a perceived need to intervene before significant damage to competition and consumer welfare results from the exercise of market power.\textsuperscript{112}

However, not all markets are susceptible to ex-ante regulation, particularly if competition is likely to emerge and shape better outcomes than administrative intervention by regulators. In 2007 the European Commission prepared its most recent recommendations on relevant product and service markets susceptible to ex-ante regulation in accordance with the Framework Directive.\textsuperscript{113} Article 2 of the recommendation requires national regulatory authorities to apply a three-criteria test

\textsuperscript{107} Productivity Commission (2001), 44

\textsuperscript{108} Although the focus of ex-ante telecommunications-specific regulation is no longer only the former monopolist incumbent, such regulation remains in place in all countries today, notwithstanding substantial liberalisation in most countries.

\textsuperscript{109} Section 1 and 2 of the US Sherman Act, Articles 101 and 102 of the TFEU, and s.46 of the Competition and Consumer Act 2010 (Cth) are all concerned with anticompetitive behaviour.

\textsuperscript{110} For example, The EC Merger Regulation - Council Regulation on the control of concentrations between undertakings (EC) No 139/2004, OJ L 24/1, 8 at Article 4.1

\textsuperscript{111} These might be specialised industry agencies such as Ofcom in the UK or the Federal Communications Commission in the United States, or may be bodies entrusted with a combination of industry-specific and general competition law administration such as the Australian Competition and Consumer Commission, the Office of the Communications Administrator in Hong Kong, the Info-Com Development Authority in Singapore and the National ICT Authority in Papua New Guinea.

\textsuperscript{112} For example, a regulator might conclude that a vertically integrated firm (that is, one operating at both wholesale and retail levels in a market) is dominant in the wholesale market, creating a risk of margin squeeze if it seeks to leverage its wholesale dominance to gain competitive advantage at the retail level. Possible regulatory interventions include setting wholesale prices at levels that permit an efficient retailer to operate profitably, and to require non-discriminatory treatment of all retail firms and operations.

before identifying markets for ex-ante regulation, other than markets pre-approved by the Commission. The criteria are:

(a) the presence of high and non-transitory barriers to entry. These may be of a structural, legal or regulatory nature;
(b) a market structure which does not tend towards effective competition within the relevant time horizon. The application of this criterion involves examining the state of competition behind the barriers to entry;
(c) the insufficiency of competition law alone to adequately address the market failure(s) concerned.

In relation to criterion (c), sometimes the nature of the behaviour considered to be anti-competitive may require substantial evidence gathering and analysis before intervention on the basis of competition law can be justified. Sometimes the need for intervention may be recurring and even on-going. These situations are not particularly suited to judicial intervention at the request of competition authorities. Such intervention may come too late to redress the permanent damage caused by anti-competitive behaviour. In these situations ex-ante regulation might be more appropriate to address the risks posed by market power before they are fully realised.

Regulatory intervention in industries that are considered to be in transition from monopoly to competition should be undertaken cautiously because the intervention may damage or delay the development of effective competition, and regulation may become self-perpetuating. Consequently, where it is applied, regulatory intervention is required to be proportionate to contain regulatory transaction costs, and to be the least intrusive measures that will also be effective.

**Competition law and oligopolies**

Competition law has long sought to establish a calculus enabling some certainty in determining the circumstances under which mere oligopolistic interdependence of

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114 The seven markets identified in the Annex to the Commission’s Recommendation.
116 This is based on the notion that regulation may actually prevent the development of effective competition, thereby justifying the continuation of regulation. An example is where regulation facilitates access to existing infrastructure at the expense of new investment: Cave, M (2004), 28-9. See also Framework Directive (2002), Article 16.3 which specifically addresses this issue by requiring national regulatory authorities to withdraw sector specific regulatory obligations that already exist when a market is concluded to be effectively competitive.
decision-making and action crosses the line and becomes cooperative or collusive. Another way of framing the issue is to ask at what point collusion may be inferred or deemed. This has proved to be a difficult challenge for the courts.  

**Facilitating practices**

Courts have identified a range of facilitating practices which, when coupled with particular market characteristics, enable cooperation to be established without verbal communication or signalling, whether direct or indirect. The existence of facilitating practices may be sufficient to justify characterising specific market behaviour as collusive based on a common purpose or a common understanding.

Facilitating practices are practices or behaviour which enable rivals to ‘better coordinate their actions’. They include practices that improve transparency such as announcements of price changes before they are intended to take effect, information exchange between rivals and participation in trade associations or industry bodies. They also include practices that are designed to aid the detection and punishment of deviations, such as most favoured customer clauses, and undertakings to customers to match any lower prices from rivals, including lowest price guarantees.

In some cases, the exchange of price information between competitors in concentrated markets has been held by the courts to be sufficient to determine the existence of an anti-competitive agreement. In these cases the courts will examine other purposes or business justifications that might be claimed by the firms involved. In *Wood Pulp II*, for example, the European Court of Justice held that the communications were

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118 *Interstate Circuit v United States* (1939) 306 U.S. 208, 223 where the Supreme Court noted: “It taxes credulity to believe that the several distributors would, in the circumstances, have accepted and put into operation with substantial unanimity such far-reaching changes in their business methods without some understanding that all were to join, and we reject as beyond the range of probability that it was the result of mere chance.” But in many cases the possibility of alternative explanations for parallelism may be clearer, leaving open the issue of where the line might be drawn and how to draw it.


120 Noble, M, (2010) op cit, 279-80

121 Ibid, 281

122 For example, in *United States v Container Corporation of America* (1969) 393 U.S. 333, the court held that agreements relating to inter-seller verification of price quotations, where customers are seeking to use a rival quote to obtain the same or a better price, contravened Section 1 of the Sherman Act. Similarly in *United States v US Gypsum Co* (1978) 438 U.S. 422 at 457, the Supreme Court held that exchange of information between rivals may be a violation of the Sherman Act.

important for the users of wood pulp—paper manufacturers—and were needed to enable them to negotiate and revise their contracts with the wood pulp producers.\textsuperscript{124}

Many facilitating practices are ambiguous in their impact and may in fact have aspects that empower consumers and promote consumer welfare. For example, various courts have held that lowest price guarantees\textsuperscript{125} and price protection policies\textsuperscript{126} are accepted practices to enable buyers an opportunity to bargain. This characterisation of the practice has often displaced any notion that such policies also constitute price fixing among sellers.\textsuperscript{127}

Facilitating practices are therefore assessed by the courts according to the circumstances in which they occur, taking account of alternative explanations of the behaviour in question proposed by the parties. Consequently, apparently similar cases have been concluded differently having regard to the judicial characterisation of the detailed facts and circumstances of the case. In the Dyestuffs case\textsuperscript{128}, for example, the European Court of Justice held that independent decisions by dyestuff manufacturers to make almost simultaneous advance price announcements could facilitate price coordination. In the later Wood Pulp case,\textsuperscript{129} however, the court held that advance price announcements were not in themselves a breach of Article 101 of the Treaty and that a system of notifications in that case was not evidence of a concerted practice, but a rational response to market conditions, beneficial to wood pulp users in negotiating contracts from wood pulp producers.

\textsuperscript{124} Wood Pulp II. Note also that other factors tended not to support a conclusion that the investigated firms were collusive. As Motta notes, “the firms involved in the investigation accounted only for 60\% of the market. It seems hard to believe that they could sustain a collusive outcome with outsiders supplying a 40\% share of the total consumption of wood pulp.” Motta (2004), 219
\textsuperscript{125} Lowest price guarantees occur when the seller undertakes to meet any price that is lower than the contract price, usually for a specified period.
\textsuperscript{126} Price protection clauses in a contract typically provide for a refund to the customer of the excess if the prevailing price falls below the contract price in a specified period. A typical circumstance where price protection clauses might be employed is where the buyer of an airline ticket using a specified credit card to make the purchase is guaranteed by the card issuer (sometimes in conjunction with the airline) that a refund will be made if the price of the airline ticket reduces to below that level within a specified time. This practice encourages early purchase and assists in capacity planning. See also discussion commencing above Footnote 214.
\textsuperscript{127} For example, in Blue Cross & Blue Shield United of Wisconsin v Marshfield Clinic (7\textsuperscript{th} Cir., 1995) 65 F 3d 1406, 1415 where the Court of Appeal (per Posner, J.) stated: "'Most favored nations' clauses are standard devices by which buyers try to bargain for low prices, by getting the seller to agree to treat them as favourably as any of their other customers. The Clinic did this to minimize the cost of these physicians to it, and that is the sort of conduct that the antitrust laws seek to encourage. It is not price-fixing." Cf. the conclusion that similar clauses in United States v Delta Dental of Rhode Island (1996) 943 F Supp 172.
\textsuperscript{128} Imperial Chemical Industries Ltd v Commission of the European Communities [1972] ECR 619
\textsuperscript{129} Wood Pulp II, (Ahlström Osakeyhtio v Commission [1993] ECR 1-1307
In summary, for conscious parallelism in an oligopolistic market to be considered to be anticompetitive, something more than evidence of parallel behaviour alone is required. This could take the form of evidence of direct or indirect communication leading to an agreement, or of facilitating practices which, when examined in terms of the specific facts and context, and having regard to other possible explanations, are such that anticompetitive collusion may be inferred.  

**Regulation of oligopolies**

Oligopolies may create serious risk of harm for competition, raising the questions of whether and how best to regulate them. A difficulty is that the effect of industrial concentration on efficiency is ambiguous. In industries with scale economies the efficiency benefits will only be achieved if the firms are large enough to sustain a minimum efficient scale. Motta concludes that “the Cournot solution predicts that the price-cost margin [profit] is inversely related to the number of firms”, which means that concentration enables firms to price above competitive levels.

Under these circumstances what should be the approach to the regulation of oligopolies? One approach is based on the recognition that collusion is hard to sustain and that price and production equilibria that have been achieved will be unsustainable as the individual interests of the parties diverge, as they are likely to over time. But such an approach offers little certainty of a pro-competitive outcome in an acceptable timeframe.

Another approach is to rely on competition law for the examination of behaviour, including facilitating practices, and to support intervention after the consequences of the behaviour for competition and consumer welfare have become apparent. As

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130 As discussed in later chapters, these are not the only alternatives that have been considered as to why conscious parallel behaviour might attract regulatory intervention.

131 The Cournot solution is the result of a model of the profit-maximization equilibrium established when firms in an oligopolistic market adjust the quantities that they produce. Motta (2004), 6-12.

132 Ibid, 112. Also, Viscusi, W K, J E Harrington & J M Vernon, Economics of Regulation and Antitrust (Cambridge, Mass. 4th ed., 2005), 162: “Note that the prediction of the differential efficiency hypothesis [the hypothesis that firms with higher market shares usually are more efficient than others in the industry] is that firms with high market shares will tend to have high price-cost margins and profits. An implication of this relationship is that industry profit will tend to be positively related to industry concentration.”

133 This approach is generally associated with the Chicago School of economics, although not all adherents to the Chicago School approach to antitrust would be as sanguine about the prospects for collusion as suggested in the text above. Baker, J B, ‘Recent developments in economics that challenge Chicago School views’ (1989) 58 Antitrust Law Journal 645, 649-51.
already noted this approach also lacks certainty, and behaviour characterisation by the courts is very context-specific, with a material risk of inconsistency in overall approach.

In devising possible solutions, it is important to recognise that the ideal of competition against which parallelism and oligopolistic rivalry might be measured also needs to be realistic. One cannot expect competitors to ignore the prospect of rivals responding to price decreases or to changes in production or capacity. Nor can one expect to see vigorous price competition of the most robust and rivalrous kind occurring all the time, without respite. It is at least as realistic to expect that competition will happen in waves and in bursts.

Regulation of oligopolies in liberalised industries with a history of monopoly is seldom left to ex post competition law alone. The emphasis is on influencing the market conditions and structure to reduce the likelihood of parallelism becoming entrenched for long periods of time and, in particular, reducing the likelihood that it might become collusive.\textsuperscript{134} One approach is via merger and acquisition policy where authorisation is denied for proposed concentrations that would result in a significant lessening of competition (compared to no merger or acquisition).\textsuperscript{135} Merger and acquisition policy essentially seeks to preserve the competitiveness already in the market.\textsuperscript{136}

Another approach, in sectors subject to industry-specific regulation such as telecommunications, is through ex-ante intervention to regulate individual and collective market power, particularly through the imposition of regulation that results in structural change such as the removal of entry barriers associated with exclusive or restrictive operator licensing. As already noted dominance is a structural concept that refers to a position of economic strength in a market and a potential to behave without being unduly constrained by the responses of competitors or customers.\textsuperscript{137} In principle, this applies equally to single firm dominance and to collective dominance. Regulators assess markets for collective dominance by examining whether typical characteristics might be present and by analysing the possibilities to determine whether the market that they are dealing with has credible and realistic potential for the oligopolists to

\textsuperscript{134} This approach assumes that parallelism is not automatically collusive or anti-competitive.
\textsuperscript{136} Proposed mergers might on occasion actually strengthen rather than just preserve competition, such as where the firm that is being acquired might otherwise leave the market. In these situations, called the "failing company defence" or justification by Areeda, P A and D Turner, Antitrust Law Vol. 3, (1978, Boston) 106-7, the effect on future competition is assessed with and without the merger.
\textsuperscript{137} Framework Directive, Article 14.2.
adopt a cooperative approach rather than a competitive approach to achieving commercial objectives.\textsuperscript{138}

The approach described above therefore involves an assessment of market characteristics, together with the development and testing of scenarios for future market development. The analysis is as much speculative as it is predictive, and certainly not determinative. The regulator is not predicting that collusion will inevitably result from the market structure. Nor is the regulator necessarily concluding that collusion is more likely than not.\textsuperscript{139} What the regulator does is consistent with constructing a narrative or scenario that may be tested against contrary evidence, including evidence from the economic literature. In the view of the author, if the narrative or scenario remains credible and reasonably compelling after such testing, the regulator will then be in a position to exercise a judgment as to whether it is sufficient to justify ex-ante intervention. The regulator will need to determine whether there is a material risk of harm to competition and to consumer welfare.

In the \textit{Better Regulation Directive}, the European Union has identified for the national regulatory authorities (NRAs) of the Member States a number of factors that the NRAs need to consider in deciding whether there is joint or collective dominance in a market for electronic communications services.\textsuperscript{140}

The \textit{Directive} adds that the “above is an indicative list and is not exhaustive, nor are the criteria cumulative. Rather, the list is intended to illustrate only the type of evidence that could be used to support assertions concerning the existence of joint dominance”.\textsuperscript{141}

The \textit{Directive} makes no mention of oligopolistic or concentrated markets, which is not a necessary criterion for collective dominance. However, in practice, regulators may be concerned to understand the level of concentration and the numbers of competitors

\textsuperscript{138} See Framework Directive, Annex II.
\textsuperscript{139} This point is contentious. Rey notes that “[e]ven assessing the likelihood of collusion is a tricky issue. We have seen that the sustainability of tacit collusion depend on many facts – and only some of them can be quantified to a reasonable degree of precision. In addition, it is rarely the case that all factors go in the same direction in a given industry.” Rey, P. in Buigues & Rey (ed.) (2004), 102.
\textsuperscript{140} Better Regulation Directive, (Clause 28), Annex II and Article 14(2).
\textsuperscript{141} Ibid.
because these factors will almost always be important context for and be relevant to a conclusion on the issue of collective dominance.142

None of the criteria identified in the Better Regulation Directive is necessary or sufficient to found collective dominance. However a careful market analysis will need to consider each of them in isolation. This is made difficult by the absence of information to enable application of some criteria and the ambiguity of some of the criteria, such as the criterion concerning similarity of market shares. Outlined below is an analysis of each of the criteria identified in the Directive.

**Similar Market Shares**

If the competitors have similar market shares they may have similar scale economies and, depending on the technologies that they employ, they may have similar cost structures. For example, in the telecommunications services market equipment vendors operate globally and will supply network equipment and software of the latest design and technology to all operators – indeed, to anybody. Cost differences may occur between operators in a single national market, but these are likely to arise from operational processes and other local factors, and from scale economies. Market share may therefore be a proxy for costs and related factors that might cause service providers to have similar operating circumstances to each other and therefore similar interests and opportunities in the market.143 In addition the economic literature suggests that concerted behaviour is at risk of being undermined by competitors with low shares and unrealised commercial aspirations.144 Such competitors are unlikely to achieve improved positions in the market through cooperation with other, larger competitors.

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142 “Each of the ... impediments to effective oligopolistic coordination will be increasingly exacerbated as the number of firms becomes larger.” Areeda, P, *Antitrust Law Vol. 6*, (Boston, 1986) 181. Rey (2004), 94 notes that with more firms involved “the gain from deviating increases for each firm, since, by undercutting the collusive price, a firm can steal market shares from all of its competitors; ... Second, for each firm the long-term benefit of maintaining collusion is reduced, precisely because it gets a smaller share of the collusive profit.”

143 Cost data is generally difficult for regulators to obtain without establishing complex regulatory accounting reporting regimes, and certainly difficult relative to market share information.

144 While agreeing on this point in the short run, Stenborg argues that the potential benefits are greater for larger firms. Stenborg, M, ‘Forest for the Trees: Economics of Joint Dominance’ (2004) 18 *European Journal of Law and Economics* 365 at 374: “Intuitively, the incentives to stay in a collusive equilibrium are very different for large and small firms. A small firm will have some incentive to cheat in the short run, as it can only increase its sales marginally up to the capacity level. A large firm, in contrast, has a lot more capacity available and can gain more customers with the same price deviation from the collusive norm.”
**Barriers to entry**

Legal barriers to entry, such as a policy of limiting the number of operating licences that may be granted through quotas or bidding contests, are undoubtedly important and would encourage existing licensees to believe that they were to some extent protected from potential new entry.

Economic barriers to entry can potentially take many forms. Cave considers that the only economic barriers that should be considered are those preventing the achievement of scale economies in markets. These occur where returns to scale continue to be effective for a large part of the market demand and therefore where these effects are not quickly exhausted. In such a market, however, collective dominance would involve one or more of the existing competitors in sub-scale operations and therefore any oligopolistic equilibrium that might be achieved would be inherently unstable and likely as a result to be short-lived.

In markets of the kind that Cave describes, the concern of regulators is not about immediate or short-term competition, or about collective dominance. The concern is about longer term single dominance and potential monopoly. Of greater concern in relation to collective dominance are markets, such as retail mobile services markets in which returns to scale are substantially exhausted around the 25 – 30% level of market share (perhaps higher in small national markets), and where two or three operators can operate comfortably but new entrants may struggle.

Other economic barriers that have been identified are financial advantages through preferential access to capital; preferential access to other assets, such as rights of way acquired under previous state ownership in former monopoly times; access to superior technology through patent or other exclusive rights; and foreclosure of markets through long-term or exclusive arrangements with customers and partners.

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145 Cave, M, (2004), 34
146 The share range is supported by demand analysis on publicly available mobile network models. Also, see European Regulators” Group, “Common Position on Symmetry of Fixed Call Termination Rates and Symmetry of Mobile Call Termination Rates” (2008) ERG (07) 83 Final 080312, 92 (Figure 18).
148 Ibid.
149 Ibid.
150 Ibid.
Vertical integration with collective refusal to supply

Vertical integration means operating at retail and wholesale levels in the same market. If a service provider produces the inputs required for its own retail level services, then it has a wholesale capacity even if it is only using it for self-supply to its own retail operation. This typically happens when a network operator is also a service provider.

A refusal to supply means a refusal to supply the wholesale service to others, including to competing retail operators. This may be taken as a criterion based on actual behaviour if the refusal has been made manifest. Regulators are entitled to examine past behaviour and negotiations between competitors in assessing the possibility of similar behaviour in future. However such evidence is not necessary in order to support a finding of collective dominance.

Countervailing buyer power

If customers for the relevant services are able to exercise some power or leverage in the course of a purchasing transaction – that is, bringing to bear countervailing power to the market power of the service providers – then the likelihood of collective dominance will be reduced or eliminated. This may occur where the linkages and opportunities to respond extend into other markets, or into other relationships and transactions. It may also occur in other circumstances, such as where the buyers are organised into retail or other trade associations and can exercise collective force for their own benefit.

Lack of potential competition

The existence, or lack, of potential competition, as opposed to actual competition, has proven to be a difficult criterion to assess. One issue is how palpable and immediate the potential competition might need to be for it to be taken into account in assessing the competitiveness of a market. Various economists, especially those of the Chicago

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152 As in Queensland Wire Industries Pty Ltd v BHP, (1989) 167 CLR 177, where BHP's refusal to supply Y Bars to the plaintiff was an agreed fact.
153 Ex-ante regulatory intervention is based on an assessment of market structure and of the likelihood that the structure may enable competitors with a position economic strength in the market to abuse that position. This is unlike in a competition law case where the enquiry is whether behaviour is anti-competitive.
154 Example, Eastern States Retail Lumber Dealers' Association v United States, (1914) 234 U.S. 600 where a retail lumber association circulated lists of wholesalers who competed in retail markets.
School, have tended to rate highly the possibilities of potential entry and of the contestability of markets, with the result that both regulatory and competition law interventions are less likely to be justified, on their analyses. However, the Hypothetical Monopolist (or SSNIP) Test for determining the boundaries of substitutability contemplates a more specific time period in which potential suppliers can switch existing production capacity to address the changed conditions in the market subject to the SSNIP. This means that the time allowed for supplier responses would typically be a year or less, although the nature of the industry concerned would need to be taken into account. In principle, a shorter time horizon is to be preferred for the purposes of justifying ex-ante regulatory intervention which is responding to the shorter term circumstances of a market. The alternative would be to set contestability in a timeless dimension with the result that most markets may be considered contestable in the long run, and therefore be deemed to be competitive, now, as a result.

**Conclusion**

In this chapter the key concepts that comprise the conceptual framework applied in this thesis have been defined and explored in a preliminary way. The conceptual framework will be employed to structure the analysis in later chapters of this thesis.

In this chapter dominance has been identified as a key, structural concept and it is to be distinguished from behavioural concepts, even though structure establishes conditions which may be conducive to various types of market behaviour. The proposition has been argued that to conclude that a firm is dominant in a market or that a number of firms are collectively dominant is not a prediction that their position and interests will inevitably lead to abuse of the power associated with dominance. The relationship between structure and behaviour does not justify an automatic causal linkage being made.

This is consistent with another proposition that has been argued, namely that collective dominance, being a structural concept, should not to be conflated or confused with behavioural concepts such as explicit and tacit collusion, and conscious parallelism. It is enough to note here that, notwithstanding the comment just made, the connection between collective dominance and tacit collusion has been firmly established in the legal

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record and economic literature. The relationship between these concepts will be explored further in Chapter 3 and later chapters.
Chapter 3: Economic Approaches to Oligopoly and Non-Competitive Markets

Introduction

This chapter is concerned with how economic theory has shaped the way in which the problem of oligopoly has been framed, and the solutions that are suggested as a result. The next chapter will examine the way in which the courts generally have responded and incorporated economic thought in the legal settings for addressing the problem of oligopoly.

This chapter examines the way in which economic theory has reflected changing perceptions of the objectives of antitrust (or competition law) policy. This is important because the economic literature shows a tendency to react and overcorrect as the shortcomings of one economic theory after another are identified.

The explicit agreement paradigm is based on the elements that are to be found in overt agreements and clear understandings supported by communication between competitors where they agree on certain market outcomes that would otherwise be determined by the interplay of competitive forces in the market. Competitors might agree for example on minimum price levels, or on capacity constraints, or on the allocation of customers or contracts between them. These agreements and understandings, based on the examples given, clearly have the intention of substituting cooperation for competition and have both the purpose and effect of substantially lessening, and possibly eliminating, competition in the market concerned.

The law is concerned with all elements of the paradigm, including intentionality. As this chapter will show, economic theory, in contrast, is primarily concerned with the outcome, and the overall effect of the arrangement on the functioning of the market. Economic solutions to the problem of the tendencies of some markets, and particularly of some oligopolistic markets, to produce non-competitive outcomes are therefore likely to reflect this concern, and, unlike legal solutions, be less concerned with the specific intentions and specific coordinating behaviour of the competitors involved.

Some economic theorists have argued whether there is a problem associated with oligopoly or non-competitive market structures, and if so, under what circumstances a problem might arise requiring a solution. This chapter will review the nature of this
debate and will argue that there is a problem, and that addressing the problem, once it is defined, is required.

This chapter is also concerned with the position of sector regulators, such as in the electronic communications (including telecommunications) field, and the power to take ex-ante action in anticipation of market failure, particularly failure resulting from dominance in the relevant market. It is important for the development of any regulated sector and for attracting the required levels of investment, that the interventions of sectoral regulators should be principled – that is, be based on relevant criteria that apply systematically and predictably, and which can be fully explained. This is an exercise in probability and judgment that is not fully amenable to proof. The regulatory acts of intervening or not intervening mean that the die has been cast and it is impossible to assess with certainty what outcome would have resulted if the alternative option had been adopted.

**Market power**

Competition policy is concerned with facilitating the continued operation of competitive markets and with addressing factors that prevent markets from operating in a competitive manner. Competition policy is a means to an end, not an end in itself, and that end is improvement in overall economic welfare through the promotion of efficiency both directly and indirectly.  

As noted in the previous chapter, the primary purpose of competition policy is to ensure that the economic welfare benefits of competition are realised. A major benefit sought from competition is improvement in operational, allocative and dynamic efficiency levels in markets, so that the cost of goods and services is reduced, resources are allocated efficiently to those who value them most, and incentives for innovation and improved processes will be reinforced. These are the economy-wide benefits that are sought through competition. However, a competitor or group of competitors in a market will not be concerned with these objectives when developing and implementing a business strategy to achieve their commercial objectives. Commercial participants in markets typically seek to maximise profits and the returns to their owners. Competition

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156 For example, K G Elzinga, ‘The Goals of Antitrust: Other than competition and efficiency, what else counts?’ (1977), 125 University of Pennsylvania Law Review, 1191. However, Elzinga noted that social equity and efficiency are “not mutually exclusive domains” and that antitrust (competition law) may serve equity goals “when it promotes efficiency in resource allocation by preventing the cartelization and monopolization of a market shopped in by low income buyers”. (1194)
may not be the best market environment for individual commercial participants to
achieve their business aims. It may be that their goals are best achieved if they are able
to reduce the costs associated with competing and to increase the prices obtained for
their goods and services.

Alternatively, it may be that it is in the commercial interests of a competitor in a market
to compete on the merits of its goods and services and to achieve an eminent position in
a market based on those merits, and on its brand and market reputation with
customers. The circumstances of the market and of the individual competitor, as
perceived by that competitor, will determine at any given time whether competition or
cooperation is considered to be in the competitor’s best commercial interests. One
matter that the competitor will need to consider is whether it occupies a position of
economic strength in the market relative to other competitors. A competitor may have
appreciable market power in its own right and may adopt the role of a single dominant
firm. Alternatively, as a second option, the competitor may not consider that its market
position is strong enough to enable it to act as a single dominant operator, and may
adopt a more cautious approach by accommodating some other competitors to achieve
outcomes that are optimum on a collective basis. Other choices that it has would be,
firstly, to compete as effectively as possible, and, secondly, to follow the lead of others
in determining its market conduct. A competitor in a market may adopt all of these
choices at different times.

The second option referred to above (that is, cooperation rather than competition with
other participants), is only distinguishable from the last option (that is, following the
lead of others in determining its market conduct), by the degree of active agency
involved. The second option may lead to the creation of power of a collective nature in
the market. This means that, so long as the cooperation continues, the competitors
concerned will have a degree of market power collectively that they do not have
individually.

**Collective Dominance**

Sector regulators are typically authorised by legislation to intervene in markets that are
failing or will fail to generate competitive outcomes. They need to be able to do this in a
justified and predictable manner. Anticipatory ex-ante regulatory intervention seeks to
link market structure with future behaviour, and therefore, with competitive outcomes.
Economic analysis is primarily concerned with outcomes and therefore may be said to have an objective approach. On economic theory the fact or likelihood of a non-competitive outcome would be justification enough for taking corrective action.

Tacit collusion is an economic term which springs from the basic concern about situations in which competitors cooperate with each other, without overt agreement or communication, to avoid or reduce competition.\textsuperscript{157} It is about behaviour, just as explicit collusion is about behaviour.

Market dominance might be distinguished from tacit collusion because dominance relates to a position of economic strength in a market.\textsuperscript{158} It is a concept based on market structure. Neither single nor collective dominance are behaviour as such. Rather, they are about occupying a position of economic strength in a market sufficient to enable the competitor(s) concerned to behave in certain ways with impunity and without being unduly concerned by the responses of competitors, customer or consumers.\textsuperscript{159}

The two concepts are distinct. Tacit collusion relates to behaviour and collective dominance relates to a position of power within a market structure. However, over time, the concepts have become conflated. As Massey and McDowell note: “A finding of collective dominance may be made purely on the basis that the structure of the market is conducive to tacit collusion,”\textsuperscript{160} and “[j]oint dominance is usually interpreted as meaning tacit collusion or coordinated effects.”\textsuperscript{161}

Baxter and Dethmers note that “[t]he terminology most commonly used in economics that corresponds to collective dominance is ‘tacit coordination’, a phenomenon unique

\begin{footnotesize}
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\item \textsuperscript{157} Ivaldi, M, \textit{et al}, ‘The Economics of Tacit Collusion’ (EC Final Report for DG Competition, 2003), 4: “... competition may be threatened ... when a number of firms engage in what economists refer to as tacit collusion, as a result of which their behaviour may approximate that of a single dominant firm.”
\item \textsuperscript{158} Massey, P and M McDowell, ‘Joint Dominance and Tacit Collusion: Some Implications for Competition and Regulatory Policy’, (2010) \textit{6 European Competition Journal} 427, 434: “A finding of collective dominance may be made purely on the basis that the structure of the market is conducive to tacit collusion.”
\item \textsuperscript{159} United Brands Co v Commission of the European Communities [1978] [1978] E.C.R. 402, [65]: “... a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.”
\item \textsuperscript{160} Massey and McDowell (2010), op.cit., 434
\item \textsuperscript{161} Ibid, 436
\end{itemize}
\end{footnotesize}
to oligopolistic or highly concentrated markets, by which the few sellers on the market recognise their interdependence with one another”. 162

The concepts are effectively the same for some commentators or they are so closely related that they can be assumed always to be either both present or both absent. The question is whether there are any adverse consequences of the conflation? If a concept that is based on a position of economic strength is conflated with a concept that has its roots in explicit collusive behaviour then, in all likelihood, being in a collectively dominant position risks being taken to be an abuse of that position, since evidence of any further cooperation that is the basis of tacit collusion, will not be possible. Being singly or collectively dominant may be the result of commercial merit, including having superior brand or products. It may also reflect the quality of all or some of the competitive firms in the market. Competition theory encourages competition on the merits in this way, and cannot at the same time punish the achievement of positions of strength, where that is the likely outcome of successful competitive behaviour in the market place. 163

One might reasonably ask whether there is a role for the concept of tacit collusion. It might be argued that either there is collusion or there is not, and, if there is, then evidence of how an agreement or understanding was, in fact, made would need to be produced. On this approach, reliance solely on the possibilities inherent in the market structure would be insufficient. Parallel behaviour alone would be insufficient evidence of collusion in such an approach, as it is now. 164 On this view, if the competitive outcomes in a market are sub-optimal or otherwise of concern, that fact alone should be the justification for intervening, rather than attempting to justify intervention on the basis of assumed or inferred collusion.

It is not enough to substitute the term ‘tacit cooperation’ for ‘tacit collusion’ or ‘non-co-operative collusion’, as suggested by Davies and Olczak. 165 Although ‘cooperation’ may

163 See Kovacic and Shapiro (2000) op.cit. 43: “The Sherman Act’s language and legislative history indicated that Congress did not condemn the status of monopoly. Instead, the crucial initial analytical task for courts was to define the sort of behaviour which, when coupled with monopoly power, constituted illegal monopolization.”
164 See later in this Chapter and also in Chapters 5 and 6
avoid some of the problems associated with connotations of the word ‘collusion’, the problem in focus here – conflation of a market structure concept with a market behaviour concept – would not be resolved. Cooperation is behaviour as much as collusion is, and it is as difficult to find reliable structural indicators of cooperation as it is to find them for tacit collusion.

**Horizontal Agreements**

Horizontal agreements are agreements (or understandings or arrangements) between parties who are in the same position in the supply chain in relation to a market. They are therefore agreements between competitors.\(^{166}\) This is to be contrasted with vertical agreements, which are agreements between parties who occupy different positions in a market and on the supply chain. A vertical agreement may therefore be between manufacturers and wholesalers or retailers, or between various levels of wholesalers in the supply chain, or between wholesalers and retailers. An integrated supplier\(^{167}\) may seek to foreclose retail competition through vertical wholesale agreements that favour its own retail operation. But this need not be the case, and such vertical arrangements do not necessarily have the direct and often collusive character that is offensive to competition law in the case of horizontal agreements.

In the analysis of approaches to oligopoly and to the relationships between parties in a market, the emphasis is therefore on horizontal agreements and arrangements where the parties involved might be expected to compete in a direct way.

Economic theory is especially concerned about markets in which dominant firms are vertically integrated,\(^{168}\) and which operate at both the wholesale and retail levels of a market. Where a firm is a wholesaler only, it is likely to seek to maximise its sales to retailers and would generally have no reason to discriminate unfairly against any of its retailer customers. However, where a firm is both a wholesaler and a retailer in the same field competition issues arise because the firm may well prefer its own retail business to other retail businesses that are competing with it. In these situations there

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\(^{167}\) See footnote 168, below

\(^{168}\) That is, where the firm operates at both wholesale and retail level in the same general market. This typically occurs in telecommunications, amongst many other industries, where many service providers are also network operators and capable of wholesaling services to other service providers that compete with their own downstream retail business operations.
may be an abuse of a dominant position but, because it is a single firm that is vertically integrated, behaviour in the market place is potentially an abuse of single dominance in one or both of the wholesale and retail markets, and not collective dominance or some form of collusion or cooperation. There would be no cooperation between independent firms in such a case.

**The Oligopoly Problem**

The traditional oligopoly problem is how to identify collusive or cooperative behaviour between firms in those circumstances where there is no evidence of actual collusion or of an explicit agreement or understanding, but only of actions that are consistent with such cooperation. The problem is compounded by behaviour that is consistent with competition also being used as evidence of collusion. Parallel behaviour has that characteristic. It can be ambiguous in referring to behaviour that represents a competitive response by a firm to the overall circumstances of the market in which it operates, and also may represent a non-competitive response because price equilibria are established by acquiescence at higher levels than would be the case if the parties reduced prices in response to each other’s prices. This approach to the oligopoly problem was more than purely-outcome oriented because price equilibria are consistent with the functioning of a competitive market, provided that the equilibrium is capable of being disrupted by the dynamics of the market itself and the patterns of supply and demand are not inhibited by cooperative arrangements between the competitors in the market to sustain and extend the equilibrium.

The ambiguity that can arise from parallel behaviour may be illustrated by the following situation. Imagine a market with three suppliers, A, B and C, with market shares by revenue of 45%, 30% and 25%, respectively. This market structure, which may be typical of many network service markets such as telecommunications, would qualify on most definitions as an oligopoly – that is, it has few sellers. Imagine, further, that the cost structure for each supplier is capital intensive with a high proportion of fixed costs yielding substantial economies of scale. This means that unit costs will be lowest for Supplier A and highest for Supplier C. All three suppliers will set their respective prices having regard to many factors other than their own immediate costs, including the potential for expansion, changing consumer preferences and prevailing market prices. If

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Supplier A prices its services as if it has Supplier B’s costs, it will be achieving a return that is in excess of the margin that might be appropriate on its own costs, but its prices would be competitive with those from Suppliers B and C assuming those suppliers priced to their own costs. However, to be competitive, Supplier C would need to price below the level suggested by its costs, and would need to accept a lower margin in the short term, to remain competitive and not risk loss of customers. The overall result could well be to establish a price equilibrium in the market, possibly for an extended period, until one or more of the suppliers determined on a different price strategy. The price equilibrium would have been established above market cost, with such costs being taken to be the average of the three suppliers, weighted by market share.

In this example, all of the elements of the oligopoly problem are present. The suppliers are aware of each other’s market share, and, from their own direct experience, have a good understanding of each other’s costs. They have set prices rationally and for their own perceived commercial benefit, taking into account all of the market information available to them. Although there may be some variation in price-service packages available from individual suppliers, there is effectively no price competition across the relevant market. There is parallel pricing behaviour, and it is conscious parallelism because all three suppliers have set their prices very deliberately taking account of prevailing market price levels and the effects of continuation of prices at that level.

Assuming that the above situation is non-preferred by policy-makers, the issue becomes what sort of a problem is it, how material a problem is it and what might or should be done about it?

As discussed in Chapter 4 legal academics and the courts have tended to see the problem as one of evidence, and inferences to be drawn from evidence, about agreement or understanding, and therefore to find solutions in applying the paradigm drawn from explicit collusion. Economists, in contrast, have tended to see the problem in terms of the outcomes for economic welfare, and to see a range of possible solutions. The solution might be to let the market operate and move to new price outcomes over time, or for the State to intervene in some way to change the market structure and therefore the influences on price-setting, or, at the extreme, for the State to directly establish prices.
In his 1964 paper on oligopoly, Stigler accepted as a starting point that oligopolists “wish to collude to maximise joint profits”.\textsuperscript{170} This starting assumption begs the whole of the question from a legal perspective. It also has problems in terms of the theoretical situation in the example described above. In that case, if suppliers A, B and C were oligopolists in the theory-laden terms described by Stigler, they would have explored the possibility of setting price levels at or above Supplier C’s costs. Such prices would likely have been higher than prices based on Supplier A and Supplier B’s costs.

Stigler recognised that maximisation of industry profits requires some complexity in the price structure: “even with a physically homogenous product the profits will be reduced if differences among buyers are ignored. ... A price structure of some complexity will usually be the goal of collusive monopolists.”\textsuperscript{171} However, the complexity of the price structure, which is the focal point of the oligopolistic collusion, also makes it more difficult to achieve an understanding in the first place, particularly one that is shaped in the absence of explicit agreement and of direct communication between the competitors, and makes it more difficult to enforce the understanding thereafter. “A complete profit-maximizing price structure may have almost infinitely numerous price classes: the firms will have to decide upon the number of price classes in the light of the costs and returns from tailoring prices to the diversity of transactions.”\textsuperscript{172} This begs the question of how the firms “decide” in the absence of the communication and negotiation that attends the formation of explicit agreements. Stigler did not consider the possibility that price collusion could be based around some key headline prices that are relatively easy to identify and to monitor.

We can therefore conclude that, at the least, the notion of oligopoly as industry profit-maximisation has internal tensions, and even potential contradictions, as the consequences of the notion are explored. Industry profit-maximisation is a clear criterion for detecting anti-competitive behaviour in oligopolies. To require that oligopoly profits should be maximised is to set the bar too high and risks allowing behaviour that results in price collusion or cooperative price setting to be accepted as competitive simply because the prices that result are not profit maximising. The important consideration one would think is that the prices that result are above the cost-reflective levels that would be expected in a competitive market over the longer

\textsuperscript{171} Ibid, 45
\textsuperscript{172} Ibid, 45-6
term. It will be relatively easy to show, as in the theoretical example set out above, that a different set of behaviours might produce even higher profits, notwithstanding that the returns actually achieved are supra-normal for the type of industry in question. It does not help to water down the standard from industry profit-maximisation without qualification to, for example, industry profit-maximisation to the extent that the circumstances and structure of the market permit. How could such a watered down criterion be applied?

This is not to say that industry profit levels might not be relevant to understanding competitor behaviour in an oligopolistic market. It might be one of a number of factors to consider, rather than the sole determinative factor, when considering whether there is an uncompetitive outcome that needs to be addressed.

Academics writing after Stigler, such as Hay\textsuperscript{173}, have moved away from emphasising industry profit maximization to the extent that Stigler did. Hay notes that the economic theory of oligopoly suggests that “the same non-competitive price might be achieved without any formal agreement; it could emerge from each firm’s recognition of its interdependence with its rivals and the resultant individually rational pricing strategy”.\textsuperscript{174}

Hay identified two problems that economic theory raised for the approach included in antitrust legislation such as the Sherman Act:\textsuperscript{175}

This possibility poses two dilemmas for traditional notions of Sherman Act liability. First, it is difficult to apply the notion of agreement, the doctrinal heart of antitrust liability, to behaviour based on individual calculations of profit maximization. Second, liability, at least in the antitrust context, normally requires some form of culpable behavior. Under the economic theory of oligopoly, however, the individual firm has done nothing more than to conclude that it would be foolish to charge less than a “monopoly” price.\textsuperscript{176}

Hay considered that the policy dilemma posed by pure oligopoly to be more theoretical than real and that it would likely be rare for oligopolistic interdependence, by itself, to


\textsuperscript{174} Ibid, 441

\textsuperscript{175} Sherman Act, (1890) U.S. Chap. 647, 26 Stat. 209

\textsuperscript{176} Ibid. Emphasis added
be able to produce non-competitive performance. Hay’s view was that, without more to sustain non-competitive performance, such arrangements are unstable and likely to collapse before they produce serious outcomes. He referred to “‘complicating factors’ that interfere with the accomplishment of the two oligopoly tasks” – namely, establishing a mutual understanding on price or output, and promoting mutual confidence that the understanding will be adhered to. To Hay the three most significant complicating factors are industry structure, the nature of the product and the nature of sales.

In the case of industry structure, Hay noted that “[i]n general, the greater the number of firms and the greater the difference in firm sizes, the more difficult it is to accomplish the oligopolists’ tasks. The larger the number of firms and the greater the variance in size, the more likely that non-trivial cost differences among firms will exist, thereby complicating the problem of calculating the optimal industry price.” The potential for adherence will also be quite varied in these circumstances. As Hay pointed out, “In general, the smaller any single firm’s market share, the greater is the incentive for that firm to deviate from the consensus price.”

In relation to the nature of the product, Hay outlined a similar view to Stigler, namely that the level of complication of the oligopolists’ task will depend on whether the product is a single item or a complete product line. On this point Hay wrote: “The broader the product line, the greater the number of individual prices to determine and maintain”. Cheating on a collusive agreement may also be harder to detect. Hay did not consider the possibility of coordination around headline prices for the most important products in the range, which might be a useful means of handling complexity of this kind. Hay conceded that high fixed costs are important, but they affect the incentive to collude rather than the ease of colluding:

177 Ibid, 445
178 Ibid, 447
179 Ibid, 445
180 Ibid, 447
181 Ibid
182 Ibid
183 Ibid, 448
...the ratio of fixed to total costs is also an important product characteristic. When fixed costs are high relative to total costs, the incentive to shade price is large because the margin between price and variable cost is considerable.  

In relation to the nature of sales, Hay made the important point that the sales pattern in an industry can be very important for collusion to be successful, and therefore for whether it will happen at all. For example, the possibilities for cheating on a collusive understanding, assuming that there are collusive understandings in the first place, are enhanced when there are “lumpy” sales, “when firms make relatively few sales per year, with each sale accounting for a sizeable portion of annual income”. Secret sales, where the price is not made known, also have the same effect. They enable competitors to cheat on any understanding they might have with each other about price or other terms of supply.

On Hay’s view of the matter pure oligopolistic interdependence may be all that is needed in some circumstances to be able to conclude that there is an agreement or understanding in place:

Where conditions are extremely favourable, no overt acts are required to produce the requisite mental state, and a non-competitive price is established and maintained solely by pure oligopolistic interdependence. No less a meeting of the mind exists when duopolists, with identical costs and an openly sold standard product, select the identical price list and recognize the folly of price cutting, than when twenty manufacturers with widely differing costs producing a differentiated product sold secretly to sophisticated buyers “agree” in a hotel room to charge an identical price.

On this view it will all come down to the conditions that ought to be identified as favourable. Hay’s view suggests that such favourable conditions should be considered to be determinative, at least in aggregate. Hay’s view is based on acceptance of some form of intentionality, or “meeting of the minds”, or, at least, “a common ‘mental

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184 Ibid, 450
185 Ibid
186 Ibid
187 Ibid, 456-7
188 Ibid, 466: Hay refers to the circumstances in a market which enable a finding of tacit collusion as facilitating behaviour, and also as “plus factors”, which will be discussed more fully later in this chapter.
state”\textsuperscript{189} between the tacitly colluding parties, which is the broad equivalent of explicit agreement where the collusion is clear and non-tacit.\textsuperscript{190} However, if conditions for such a meeting of the minds are overwhelmingly favourable, the meeting of minds might be readily inferred, and be, in effect, a formality.

The notion was taken further by Werden who said that “modern oligopoly theory ... is the only rational basis for evaluating economic evidence on the existence of collusion”, and by “modern oligopoly theory” he meant game theory, and, specifically, the learning that comes from repeated games.\textsuperscript{191} In this model of the market, “non-cooperative equilibrium” is established in a market when “no player has an incentive to alter its action in light of the actions being taken by the other players.”\textsuperscript{192} Whether a player has an incentive might be established objectively by considering the player’s circumstances and whether advantage might result from any further action on its part.

An earlier view that Werden is at pains to refute is that of William Fellner, who considered that it was almost inevitable, in an oligopoly, that there would be “quasi-agreement” or what he called “spontaneous coordination”.\textsuperscript{193} Fellner noted that there was a problem to be addressed but he argued: “To legislate against oligopoly and against quasi-agreements is less promising than many optimists may have believed. Not much is gained by trying to force a group of oligopolists to behave as if they were not aware of their individual influence on each other’s policies.”\textsuperscript{194}

Fellner’s argument is without merit. The point of legislation or of regulatory action would not be to force oligopolists to be unaware of something of which they are actually aware or to behave as if they were ignorant. Rather the point would be to alter the structure of such markets to facilitate more competitive outcomes.

Werden pointed out that the approach of Fellner and other economists to oligopoly behaviour was eventually displaced by game theory, especially in the case of repeated games.\textsuperscript{195}

\textsuperscript{189} Ibid, 456
\textsuperscript{190} Ibid, 466
\textsuperscript{192} Ibid, 721
\textsuperscript{194} Ibid, 309-10
\textsuperscript{195} Werden (2004), op. cit., 729
The idea [of repeated games] is that players can be induced to act more in their collective interest, rather than their individual interests, through the use of trigger strategies that punish defections, i.e. actions contrary to the collective interest.¹⁹⁶

These insights do not address squarely the issue raised by Fellner and others of requiring oligopolists to act as if they were not aware of the interdependence of their and others’ behaviour, but, as noted above, that issue is at least partly based on a limited and therefore unrealistic notion of the potential nature of intervention orders in a market. Nor does game theory say anything about how players come to know the rules of the game or of how equilibrium is achieved.¹⁹⁷ Game theory only posits that players will realise at the second stage of a repeated game that they are better off choosing an equilibrium strategy rather than a defection strategy.¹⁹⁸

To the question whether there is an oligopoly problem that needs to be addressed, therefore, the game theory approach shows that under appropriate conditions of relatively few market participants¹⁹⁹ and non-cooperative relationships between the parties the same outcomes recur and those outcomes involve achieving supra-competitive levels of profit at a market or aggregate level. The almost inevitability of such results means that describing the problem as too difficult to be addressed, or trusting the market dynamics of an oligopolistic market, such as they might be, to break down the cooperation, will not be an acceptable response. The equilibrium achieved through repeated games with few competitors may be disrupted by changes in the circumstances of one or more of them. On the other hand, the equilibrium might generate a comfortable inertia and encourage the competitors to persist with the relatively risk-averse behaviour that they have adopted.

¹⁹⁶ Ibid, 730
¹⁹⁷ Ibid, 732
¹⁹⁸ Ibid, 730-1
¹⁹⁹ How small the group of oligopolists need to be is uncertain. Werden (2004) writes (at 732): “Under plausible assumptions, the [repeated game] theory has been shown to predict that the monopoly price is a possible outcome if there are fewer than four hundred competitors!” This is hardly a small number, but if the theory works for such a large number, one may feel comfortable that it is likely to work more consistently and reliably for smaller numbers.
Plus factors and facilitating practices

The notion of “plus factors” is of additional factors that might exist as part of the market context in particular cases which would be sufficient to justify conscious parallel behaviour to be seen as concerted.\(^{200}\)

Kovacic et al\(^{201}\) set out some of these additional factors – or “plus factors” – that “lead to a strong inference of explicit collusion”.\(^{202}\) The strength of any plus factor, according to Kovacic et al is “determined by the likelihood of an action in the presence of an agreement and the likelihood without the presence of an agreement”.\(^{203}\) The actions listed by Kovacic et al included prices being raised above the level sustainable “without the conspiracy”, reduction in total quantity (or output), change in interfirm incentives for competition, allocation of collusive gains to members and redistribution “of gains and losses among members so as to maintain compliance with the agreement.”\(^{204}\)

Kovacic et al do not, in their analysis of plus factors, move away from the notion that they are attempting to identify how an actual collusive agreement might be proven circumstantially. They were not concerned to establish or to deem a notional agreement, or to argue that any situation is as good as an agreement for all intents and purposes. In US law a literal approach of this kind would seem to be necessary, because the Sherman Act is couched in terms of “contract, combinations in the form of trust or otherwise, or conspiracy”.\(^{205}\)

Kovacic referred to facilitating practices as “plus factors”, which are defined as “economic actions and outcomes, above and beyond parallel behaviour by oligopolistic firms that are largely inconsistent with unilateral conduct but largely consistent with explicitly coordinated action.”\(^{206}\) Kovacic used the language of “consistency” rather than suggest that “plus factors” are evidence of actual agreement, even though “in antitrust cases, courts permit the fact of agreement to be established by circumstantial evidence”.\(^{207}\) Kovacic saw plus factors as, in effect, circumstantial evidence, with those

\(^{200}\) See Monsanto Case, op. cit.
\(^{202}\) Ibid, 397
\(^{203}\) Ibid, 414
\(^{204}\) Ibid
\(^{205}\) Sherman Act, (1890) 26 Stat. 209, Section 1
\(^{207}\) Ibid, 395
factors having the most probative value leading to a strong inference of explicit collusion as “super plus factors”. The whole point of circumstantial evidence is to show that there is no reasonable alternative conclusion other than that there was an agreement in a particular case. Kovacic noted that the line between “tacit agreements” (which are in effect collusive agreements like any other and prohibited by law) and “tacit coordination stemming from oligopolistic interdependence ... is indistinct”.

A different perspective was adopted by Miranda Noble, writing in a European legal context. Noble observes that “[w]hile an oligopolistic market structure can be conducive to coordination, it is not always easy for rivals to successfully coordinate or maintain that coordination.” In her view, therefore, facilitating practices are practices that help overcome obstacles to coordination, and the most common of these are practices that improve transparency.

Examples of practices that increase transparency in a market, according to Noble, include:

- advanced notification or announcement of price changes;
- information exchange; and
- participation in industry or trade associations.

Other facilitating practices might be less concerned to increase transparency and more concerned with detecting deviations from a coordinated approach to a market. According to Noble such practices include price protection policies which are ostensibly agreements between suppliers and their customers. They include:

- Most favoured customer (MFC) clauses or policies which guarantee that the customer will be charged no more than the supplier’s other customers. In these cases it is the customer who is enlisted to report on lower prices from other suppliers that might be deviations from coordinated price levels;
- Meet the competition: In this case the firm will match a rival’s offer and in the process discover what rivals’ offers might be; and
- Lowest price guarantees, in which rival low offers are matched or beaten.

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208 Ibid, 397
209 Ibid, 405
211 Ibid, 278
212 Ibid, 279
213 Ibid, 280
214 Ibid, 281
215 Ibid
In all of these arrangements for price protection the specific agreement or guarantee is with the customer and does not involve direct communications between competitors in the market. It is the customer who is given an incentive to share price information and thereby improve transparency within the market. Yet the arrangements reinforce any collusive understanding or arrangement between the competitors because they increase the incentive to adhere to a collusive arrangement that has tacitly developed between the competitors. Price protection policies occupy the place that penalty provisions might occupy in an explicit agreement. They deter non-compliance. In that sense the paradigm of the explicit commercial agreement remains the basic framework for understanding tacit collusion.

**Structure-Behaviour-Performance Paradigm**

The structure-behaviour-performance paradigm asserts that these three aspects of markets are related. The issue is how they are related and the impact of the relationship on the development of means of addressing issues associated with oligopoly competition.

Market structure is concerned with the number and size of firms in a market, entry barriers, and factors such as the diversity of products and services that the firms produce. The level of concentration in a market is a structural matter.

Behaviour refers to the way in which the firms in a market compete or otherwise interact with each other, and also to the way customers and consumers behave when they purchase of goods and services.

Market performance refers to outcomes in markets, and particularly with the price and profit levels that result. In particular, whether a market is effectively competitive is a matter of market performance.

There has been considerable development in theories linking market structure, market behaviour and market performance. In the 1930s Edward Mason\(^{216}\) developed and tested a number of hypotheses about the relationship of market structure to market performance. Most important of these was that increases in seller concentrations in a market do not affect industry profitability until they achieve a critical level, after which

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\(^{216}\) Professor Edward S Mason of Harvard University
increases in seller concentration are accompanied by significantly higher industry profit rates.\textsuperscript{217}

Bain extended this analysis in his work on industrial organisation over a long period. Bain defined a “limit price” as the price levels that may be charged by incumbent sellers in an oligopoly market without attracting the entry of new competitors. Bain’s hypothesis was that “[t]he higher the limit price is, the more likely it is that incumbents will charge the limit price and deter entry”.\textsuperscript{218} His empirical analysis suggested that industries with high concentration and high entry barriers have, over the longer term, a significantly higher return on equity and higher profit rate on sales than for industries with medium entry barriers or moderate-to-low entry barriers.\textsuperscript{219}

Bain argued against the approach of the so-called Chicago school\textsuperscript{220} of industrial organisation. In particular he considered that the Chicago school mistakenly did not consider market structure when seeking the causes of market performance:

More or less fully rejecting market structure as a determinant of market performance, the Chicago school of industrial organisation has tended to fall back on market conduct but it cannot be accused of developing any scientific generalisations concerning the relationship of market conduct to market performance for a whole population of industries.\textsuperscript{221}

Bain therefore was seeking to establish a more general relationship between market structure, market behaviour and market performance – namely that high industry concentration together with substantial barriers to entry, results in higher price levels –

\textsuperscript{217} Mason, E S, “Price and Production Policies of Large-Scale Enterprise”, (1939) 39 American Economic Review, 61-74
\textsuperscript{219} Ibid, 26
\textsuperscript{220} The Chicago school contribution to the solution to the oligopoly problem and its approach to collective dominance is discussed later in this chapter. One of its leading members, George Stigler, has already been referred to.
\textsuperscript{221} Bain (1986), op. cit. 30-1. However, the acceptance is by no means universal. For example, in the Chime Communications Case, the Australian Competition Tribunal cited the QCMA case, (Re Queensland Co-Operative Milling Association Ltd (1976) 8 ALR 481,516) where an earlier Tribunal had noted that “whether firms compete is very much a matter of the structure of the markets in which they operate” and then went on to say: “QCMA was decided at a time when industrial organisation economists emphasised the causal flow from industry structure (e.g. number of sellers, concentration, entry conditions, etc) via conduct (e.g. price and non-price behaviour) to performance (e.g. profits, efficiency, innovation, etc). This approach has been overtaken by developments in economic theory and by empirical assessments of competition in modern markets which attest to the fact that this causal flow is by no means the dominant mechanism to explain market behaviour. Thus, the QCMA paradigm is no longer an infallible guide to assessing the behaviour of firms and markets.” Application by Chime Communications Pty Ltd (No 3), (2209) ATPR 42-293, 41,121
at least to the limit pricing threshold – and consequently to above-normal returns on capital and excessive profit levels. This is the standard structure-behaviour-performance paradigm. Stigler’s analysis basically supported the notion that industry concentration and industry profitability, measured by the Herfindahl Index and average rates of return, respectively, show a positive correlation.222 However, Stigler added further empirical evidence that “the level of prices is not very responsive to the actual number of rivals. … [his model suggested] that the number of buyers, the proportion of new buyers and the relative sizes of firms are as important as the number of rivals.”223

Bain’s structure-conduct-performance paradigm is regarded as well accepted.224 Weiss noted that “Bain himself and most who have followed his lead put their main emphasis on the extent to which concentration elevates price above minimum average cost due either to higher than normal profits or increased costs.”225

The paradigm has predictive value, according to Weiss, the main predictions being “(1) that concentration will facilitate collusion, whether tacit or explicit, and (2) that, as barriers to entry rise, the optimal price-cost margin of the leading firm or firms likewise will increase.”226 Weiss noted that the predictions that arise from oligopoly theory relate to high prices not high profits, because there are a number of reasons, including over-capacity, why profitability might decline in an oligopoly, while prices remain high.227

Even if the circumstances set out by Bain and others for predictable performance are met, the prediction does not require that anticompetitive conduct, requiring proof of requisite intent, can be predicted in a determinative way. The structure-behaviour-performance paradigm provides a reasonable basis on which to predict that if there is a concentrated industry with high entry barriers then certain pricing behaviour will likely occur resulting in supra-normal profits or costs that are higher than would otherwise be

222 Stigler, G J, ‘A Theory of Oligopoly’ (1964) 72 Journal of Political Economy 44, 57-8, especially Table 7
223 Ibid, 56
224 See, for example, the conclusion in Weiss, L W, ‘The Structure-Conduct-Performance Paradigm and Antitrust’ (1979) 127 University of Pennsylvania Law Review 1104. However, a contrary view was published only seven years later, in 1986, by Easterbrook, who noted that “[t]oday it is hard to find an economist who believes the old structure-conduct-performance paradigm” and “Perhaps concentrated industries are those in which economies of scale dictate big firms. Then the structure-conduct-performance paradigm is just longing for a world in which artisans made leather artefacts in tiny shops; it is not a useful way to think about real economies or a suitable source of proposals for antitrust policy.” Pages 1698 and 1697, respectively
225 Ibid, 1104
226 Ibid, 1105
227 Ibid, 1107
the case. However, the paradigm says nothing about the behaviour being anticompetitive in the sense of being undertaken with a view to substantially lessening competition. The paradigm and its predictive value relate only to effects, and even at the level of effects, may need to be tempered by other market considerations, such as the overall level and growth of demand. In this situation, economists like Weiss have proposed a complete shift to an effects-based test:

My proposal is ... to require a market share of a relevant market sufficiently high and persistent that the firm can reasonably be considered dominant – perhaps a share of 50% or more of a market with no close rival – but that the apparent requirement of anti-competitive conduct be eliminated. 228

Weiss was focussing on single dominance as the reference to market share makes clear. However, in principle, the comment relates also to the collective position of leading firms in an oligopolistic market. He was not alone in this, and the approach – often regarded as a purely economic approach 229 – is considered further in Chapter 8.

The structure-behaviour-performance paradigm is important for the analysis of the concepts of tacit collusion and collective dominance. The concept of tacit collusion relates to behaviour, because collusion is behaviour, and therefore raises the question whether a structural analysis alone is sufficient to uncover prospects for tacit or other kinds of collusion. In practice, behaviour takes place within a structure and its potential form is shaped by the possibilities allowed or facilitated by structure. The approach that Weiss promoted further reduces the room for analysis because he has sought to identify one or a few structural elements as touchstones for regulatory or anti-trust intervention. The notions of tacit collusion (or any form of cooperative behaviour) and of collective dominance (considered as a detailed analysis of collective strength in a market, facilitated by market structure) would not be required in the regulatory settings proposed by Weiss.

In a typical situation there may be similar behaviour by a number of firms in an oligopolistic market. It may take the form of similar price levels. But there would

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228 Ibid, 1140: Note that Weiss had the then on-going IBM litigation in the US in mind, and is speaking of single dominance. However a similar approach might yield greater success in the case of collective dominance.

229 For example, see Jacobs, M S, ‘An Essay on the Normative Foundations of Antitrust Economics’ (1995) 74 North Carolina Law Review 219, 265: “Chicago scholars have insisted for a generation on denying any role to political values in the shaping of antitrust doctrine. Antitrust law, they have claimed, is perfectly suited to an exclusively economic analysis.” Jacobs is not of this view, however.
typically be no evidence of collusive behaviour or communications of any sort between the rival firms. The absence of evidence of collusive behaviour of any kind, including communication between competitors in a market, means that a conclusion that there is material risk that collusion will occur in the future must be based on some form of causal or other recurring association between structures of the kind in question and collusion in the past or in similar circumstances. For example, Massey and McDowell assert that joint dominance “is usually interpreted as meaning tacit collusion or coordinated effects.” They have an aversion to defining joint dominance in terms of market structure (the structure that might facilitate collusion) because Articles 81 and 82 of the European treaty (TFEU) concern behaviour. However these Articles are concerned with prohibiting behaviour that involves an exercise or abuse of a market position. Notwithstanding that, Massey and McDowell conclude that “[t]his requires that we define joint dominance in behavioural terms while accepting certain structural features of a market as a necessary pre-condition.” In contrast to Weiss, for example, they are de-emphasising market structure, rather than de-emphasising behaviour, in the structure-behaviour-performance paradigm.

They conclude that “[i]n the case of regulatory supervision, a finding of joint dominance, a trigger for ex-ante regulation, requires analysis of market performance rather than simple reliance on structure in the broadest sense.” Market performance analysis could take the form of examining current and past outcomes such as price levels. Whether actual supra-competitive prices must exist now or have existed in the past is not clear on their analysis. However, if the current structural conditions are associated with specific performance outcomes for price levels or other dimensions in general, and those specific performance outcomes have been observed to be present in the market in the past, when, presumably the same structure applied, then working through the structure-behaviour-performance paradigm will be easier. Even if these performance indicators are not present, Massy and McDowell’s approach requires an analysis of performance possibilities, and of why the case for certain outcomes is compelling.

231 Ibid, 16
232 Ibid, 16-7
233 Ibid, 21-2
Perfect competition and competition objectives

The oligopoly problem, as explained above, concerns the problem that occurs, typically but not exclusively, in markets with few suppliers, where the competitors find it not to be to their commercial advantage to compete on price, and independently determine that a cooperative approach, involving behaviour such as parallel pricing, is to be preferred. The problem is that the outcome is the same as if the parties had agreed to collude in a more direct way, and that total welfare is less than it otherwise would have been. The question arises, what would acceptable competition look like?

One answer, that was favoured for most of the twentieth century, was “perfect competition”. Perfect competition is a market structure in which all suppliers sell an identical product; all firms are price takers and cannot control the price of their product; all firms have a relatively small market share; buyers have complete information about the product being sold and the prices charged by each supplier; and the industry is characterized by freedom of entry and exit. It follows that there would likely be many firms in such a market, although that is not strictly necessary. However, enough competitors are needed to keep the market share of individual firms relatively small.

The economic and legislative orthodoxy in the United States in the mid-twentieth century favoured protection of smaller competitors as a means of facilitating competition. This orthodoxy reflected the requirements of perfect competition. The Robinson-Patman Act, for example, was enacted by Congress to prevent price discrimination, and, in particular, to protect small businesses from larger businesses using the advantages associated with size to extract advantages. However, Section 2(a) of the Act is subject to a requirement that, to be prohibited, price discrimination must substantially lessen competition or tend to create a monopoly, and is not to be applied in favour of smaller business units on a *per se* basis.

Another example of orthodoxy inspired by perfect competition was the Celler-Kefauver Act of 1950 which increased constraints on mergers by banning asset or stock controls

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234 Areeda, P and D F Turner, ‘Predatory pricing and related practices under Section 2 of the Sherman Act’ (1975) 88 Harvard Law Review 697, 702: “… the perfectly competitive firms accepts the market price as given since it is, by definition, too small to affect market price by any variations in output.”

235 Ibid


237 An amendment to Section 7 of the Clayton Act (1914) Ch. 323, §1
which fell short of creating dominance. The bar was raised on various categories of vertical and horizontal mergers that might previously have withstood judicial scrutiny.238

These outworkings of the notion of perfect competition, and the protection of smaller competitors, overlooked the important economic function of competition to facilitate efficiency and to generate total welfare benefits in the economy as a result. Kovacic noted that “[t]here was considerable consistency between judicial decisions and economic thinking during the 1940s, 1950s and 1960s. …economists came to realize that departures from the perfect competition model are normal, indeed inevitable, even in ‘competitive’ industries.”239 The prevailing orthodoxy at the time prevented the efficiencies relating to economies of scale from being achieved or rewarded, except, possibly through organic growth of enterprises, but even then anti-discrimination prohibitions needed to be carefully navigated.

Perfect competition is an ideal standard, but not the appropriate standard for legal or regulatory intervention. It fails to recognize that beneficial scale economies might be associated with large operations and that these could be forgone if scale is subjected to legal or regulatory penalty.

**Workable competition and effective competition**

The development of theories of workable competition were essentially reactions to the limitations of the concept of perfect competition and the inability of the latter to describe the way in which markets were structured and competition occurred in practice.

The concept of workable competition, sometimes referred to as effective competition, developed over a period. In 1940, Clark argued that the notion of workable competition required rivalry among sellers, the ability of buyers to buy from alternative suppliers, and some evidence of sellers competing with each other’s offerings.240 The importance of this notion was that it was clear that these circumstances described typical competition, which was clearly not necessarily perfect. For example, the sellers, or some of them, may have had larger market shares than contemplated by the theory of

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238 Kovacic and Shapiro (2000), op. cit., 51
239 Kovacic and Shapiro, (2000), op. cit. 51-2
240 Clark, J M, “Toward a Concept of Workable Competition”, (1940) 30 American Economic Review, 241
perfect competition. Oligopolies and markets with high concentration would not, on Clark’s view, be in danger of automatic classification as non-competitive.

Markham was concerned to define competition as workable based on performance rather than structural considerations. He offered a definition of workable competition as follows:

An industry may be judged to be workably competitive when, after the structural characteristics of its market and the dynamic forces that shaped them have been thoroughly examined, there is no clearly indicated change that can be effected through public policy measures that would result in greater social gains than social losses.  

This definition sets a high threshold and, by implication, considers markets in which potential improvements may be made through public policy or other similar measures to be non-competitive, pending those measures being implemented. The definition appears to allow for no gradation in what it is for a market to be workably competitive. However, Markham’s definition does provide a justification for intervention, based on anticipated net social gain.

Bain and Qualls have modified this definition, whilst keeping the measure as one of performance:

[W]orkable … competition in markets is revealed by, and is the result of, whatever gives rise to satisfactory or workable performance – performance that enhances economic welfare to a reasonable degree.

From the notion that a workably competitive market is one that cannot be readily improved in terms of net social benefit by policy intervention comes the further notion that workable, or effective, competition is sustainable without such intervention, and is therefore incompatible with a market that is subject to single or collective dominance.

Effective competition does not suggest maximum rivalry in a market and certainly not a high level of rivalry all of the time. An effectively competitive market is one with a structure that will lend itself to ongoing competition and the ongoing achievement of

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outcomes of the kind that would be expected in a competitive market, such as prices levels that, at least in the medium to longer term, are cost reflective. If this is not the case, the alternative is actual or impending market failure.

**Market failure**

Broadly speaking, market failure occurs where markets fail to perform as workably competitive markets perform, and this may be the result of non-competitive behaviour of market participants. Generally, if a market is operating effectively or is workably competitive, there is no reason for regulators to intervene, but if it has failed or is in imminent danger of failing there is justification for intervention. The nature of the failure might determine the type of intervention undertaken and the remedial action by the regulator, but it is failure from any cause that justifies the intervention in the first place. On this argument, it would not matter whether the cause of market failure is single or collective dominance or the performance effects of non-cooperative oligopolistic behaviour. If the market is not performing as a workably competitive market should work, then its failure to do so is at least part of the basis justifying regulatory intervention.

A problem arises from the above analysis. The performance of a workably competitive market might be effectively the same as the performance of a market characterised by non-collusive oligopoly for much of the time. Alese commented on this as follows:

> It is submitted that in most non-collusive oligopoly, price stability does live in peaceful co-existence with active competition, regardless of whether price is in equilibrium. That price in non-collusive oligopoly will tend to have long periods of stability is in fact predicted by economic theory. In an oligopolistic market with a few powerful firms, after short bursts of price warfare, the markets usually settle into prolonged periods of price rigidity. The firms then continue to wage war through packaging, loyalty rebates, prize draws, use of environmental issues and, of course, advertisement.

Price wars are not permanent, continuous features of competitive markets. However, the similarity of performance outcomes does not mean that non-collusive oligopoly is a form of workable competition, or vice versa. It means only that a longer period of

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observation might be required to observe the blocking effect on price competition of non-collusive oligopoly, compared to the price war pauses of normal, workable competition. Inevitably judgments have to be made about matters such as timing; otherwise there would likely be precipitate intervention in markets that are competitive after all.

In order to avoid this outcome, as will be discussed below, other factors might need to be present to justify intervention in a market.

**Structural aspects of markets conducive to collective dominance**

Sector regulators can look at market performance and notice that periods of price warfare are essentially short-lived, with longer periods in between where price equilibrium appears to operate. As already noted, although such performance is non-competitive, at least for much of the time, it is consistent with both non-collusive oligopolistic interdependence and also with the collusive effects resulting from collective dominance. The regulator therefore has to analyse the market in greater detail before being able to determine whether intervention is appropriate in all the circumstances.

Collective dominance occurs in markets where two or more firms, neither of which can operate without due concern about the responses of each other, operate in cooperation rather than competitively, at least on some matters. The concern here is not with ex post identification of cooperative or collusive behaviour arising from collective dominance, but with the means available to sector regulators to anticipate such behaviour and to take action to address the matter ex-ante.

The European Commission issued the *Framework Directive*\(^\text{245}\) in 2002 to National Regulatory Authorities on European Union member states that are responsible for the regulation of electronic communications (essentially telecommunications and related industries) requiring them to undertake economic analysis of the various service markets involved and to determine if the markets are characterised by single or collective dominance.\(^\text{246}\) The Directive, which in amended form remains in place,

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\(^{246}\) Ibid, Article 16
provides guidance on the criteria to be used “when assessing whether two or more undertakings are in a joint dominant position in a market.” 247

The 2002 Framework Directive was amended in 2009,248 and the number of criteria relevant to joint dominance was reduced from thirteen to five, with one new criterion added. The 2009 amendment notes that the list of criteria “is an indicative list and is not exhaustive, nor are the criteria cumulative.”249

The 2002 criteria are shown below, together with a note if they have been carried over to the 2009 list of criteria:

- mature market
- stagnant or moderate growth on the demand side
- low elasticity of demand (retained in 2009)
- similar cost structures
- similar market shares (retained in 2009)
- lack of technical innovation, mature technology
- absence of excess capacity
- high barriers to entry (retained in 2009)
- lack of countervailing buying power (retained in 2009)
- lack of potential competition (retained in 2009)
- various kinds of informal or other links between the undertakings concerned
- retaliatory mechanism
- lack or reduced scope for price competition

The additional criterion in 2009 was “vertical integration with collective refusal to supply”.250

It appears that the Commission reflected the case law over the seven years since the first list, and also removed criteria that may have been considered ambiguous, or the inclusion of which is not supported by empirical evidence. The introductory text to the reduced list of criteria notes that –

247 Ibid, Article 14(2) and Annex II
249 Ibid, Article 28. The same note appeared under the longer list of criteria in 2002.
250 Ibid
Two or more undertakings can be found to be in a joint dominant position within the meaning of Article 14 if, even in the absence of structural or other links between them, they operate in a market that is characterised by a lack of effective competition, and in which no single undertaking has significant market power. ...this is likely to be the case where the market is concentrated.\textsuperscript{251}

It is to be noted that market concentration was never on the list, recognising that joint dominance is not solely related to concentrated (or oligopolistic) markets, although, as the introductory text makes clear, concentrated markets are likely to be involved.

More concentrated markets are more conducive to collusion than where larger numbers of firms have some material level of market share. A concentrated market will often, but not always, be associated with fewer competing firms overall. With fewer firms coordination is less difficult and the incentives for collusion, in terms of fewer firms to share the collusive profits, are greater.\textsuperscript{252} In its 2002 analysis of criteria conducive to collective dominance the Commission noted that “a mere finding that a market is concentrated does not necessarily warrant a finding that its structure is conducive to collective dominance in the form of tacit coordination.”\textsuperscript{253}

The 2002 criteria are briefly examined to determine why they might have been retained or deleted from the 2009 list.

\textit{Mature market (deleted from the 2009 list)}

A mature market is one that is in the later part of the demand cycle with a high level of customer take-up. The initial view was that there was greater incentive to reduce price competition in these circumstances because diminishing new demand would not offset a price decrease. Or, from the alternative perspective, if demand growth is low to moderate then collusion is more likely. Conversely, if demand growth is high then collusion is less likely because capturing the growth requires increased investment in capacity. Telecommunications operators install capacity increments in blocks and these tend to be irreversible. It is generally not economic to move equipment from one location to another if demand reduces. This is especially the case with installed and

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{251} Ibid
\item \textsuperscript{252} Ivaldi, M, B Julien, P Rey, P Seabright and J Tirole, ‘The Economics of Tacit Collusion’ \textit{(EC Final Report for DG Competition, 2003)}, 12
\item \textsuperscript{253} SMP Guidelines (Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, (2002/C 165/03), 11.7.2002), [100]
\end{itemize}
\end{footnotesize}
embedded transmission capacity, such as optic fibre cabling buried in ducting systems. This means that if capacity is installed and growth declines against expectation, capacity and investment may be stranded or at least be in excess of requirement for a long period. However commentators have questioned whether low to moderate growth would be conducive to collusion.\textsuperscript{254} Ivaldi et al note that collusion is easier to sustain “when short-term gains from a deviation are small compared with the cost of future retaliation.”\textsuperscript{255} Therefore, they conclude, that:

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\text{[f]or a fixed number of market participants, collusion is easier to sustain in growing markets, where today’s profits are small compared with tomorrow’s... Conversely, collusion is more difficult to sustain in declining markets, where tomorrow’s profits (with or without retaliation) will be small anyway – in the limiting case where the market is on the verge of collapsing, there is almost no future and therefore no possibility to induce firms to stick to a collusive conduct.}\textsuperscript{256}
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The criterion was rightly deleted in the 2009 amendments to the Framework Directive as controversial and uncertain in application.

\textit{Stagnant or moderate growth on the demand side (deleted from the 2009 list)}

This criterion is to be assessed in a similar way to market maturity. Ivaldi’s concerns, noted above, were greater with low demand than with market maturity. Market maturity is not always related to lower demand growth, although the two characteristics often overlap. Where a service market is mature and the penetration of relevant services is high, the impact will be that demand growth will reduce. The same might occur in markets for goods, unless customers are encouraged to upgrade their item (whether it is a car or a smart phone) on a regular or frequent basis. In these cases demand might be artificially maintained, and prolonged, notwithstanding that the market is mature.

In many markets, including markets for electronic communications services, technological change and development is rapid resulting in rapid changes in demand. In these circumstances the conclusions for effective competition that may be drawn from

\textsuperscript{254} Ivaldi et al (2003) op. cit., 28: However a distinction is made between growth that encourages new entry, which may not be conducive to collusion, and growth that does not change this and other characteristics of the industry.
\textsuperscript{255} Ibid, 26
\textsuperscript{256} Ibid, 27
data on demand require particular care. Stagnant or moderate growth in demand is ambiguous for joint dominance and therefore its removal from the list is justified.

*Low elasticity of demand (retained on 2009 list)*

This criterion was retained in the 2009 list. Maintaining prices at collusive levels will not generate expected results where there is a high elasticity of demand and customers might reduce their usage levels or opt out of the service altogether. Ivaldi *et al* conclude that, “when demand is highly elastic, firms would lose too much sales (sic) if they tried to impose high prices. …for a given market size, the firms have more to gain from sustaining the monopoly price when demand elasticity is low.”

Retention of this criterion is justified on the basis that firms providing services with low elasticity of demand will normally have greater economic incentive to maintain prices at margins above competitive levels based on cost, and are likely to recognise that other suppliers in the same market have the same incentive.

*Similar cost structures (deleted from 2009 list)*

It was generally considered that firms with dissimilar cost structures would likely have sufficiently different objectives so that subscribing to a common purpose for collusion might present too many difficulties. Ivaldi *et al* make this point. However it is hard to conclude that the firm with the lower marginal cost will insist on lower prices, as Ivaldi *et al* have assumed. Such a firm might be satisfied to take a larger margin on each unit of sale. Longer term, it may decide to compete for greater market share, but this does not mean that incentives for short to medium term collusion are absent.

This criterion is ambiguous, because its absence does not mean that the incentives for collusive behaviour are also absent. Therefore, insofar as it may have been taken to be a required or desirable criterion, despite the cautions of the Commission on that point, its deletion from the 2009 list is justified. However, ambiguity should not be construed as irrelevance in this case or for any other criterion.

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257 Ibid, 52
258 Ibid, 36: “...firms may find it difficult to agree to a common pricing policy. Indeed, firms with a lower marginal cost will insist in lower prices than what the other firms would wish to sustain. More generally, the diversity of cost structures may rule out any ‘focal point’ in pricing policies and so exacerbate coordination problems.”
Similar market shares (retained on 2009 list)

Insofar as market share reflects scale economies, the impact of similar scale economies and costs, already discussed, applies. Firms with similar shares have the same opportunity to spread their fixed and overhead costs over the customer and transaction volumes that they support. In addition it has been assumed that firms with lower market shares may have less or no incentive to collude because, to do so, would lock in lower market shares for longer. It has also been assumed that such firms have less to lose from retaliation for deviation.259

Market shares are the result of many factors, and it is these factors that may provide incentives for collusion.260 Ivaldi et al note that if asymmetrical market shares result from other asymmetries, such as different marginal cost or different service quality, “the relevant question becomes the impact of these more profound asymmetries in cost or product range or quality”.261 Therefore, similar market shares may indicate some more basic reason why the market is conducive to collusion. Market share similarity alone may not be particularly useful in analysing the prospects for collusion.

Market share data is inherently ambiguous, as discussed above, and is often taken to be an overriding consideration by regulators, particularly those with inadequate data or experience in market analysis. It would have been desirable for the Commission to have deleted this criterion or to replace it with a criterion that goes to the substance of the issue – namely, whether non-transient structural aspects of the market provide strong incentives for collusive behaviour given the market position of the firms involved.

Lack of technical innovation, mature technology (deleted from 2009 list)

This characteristic is ambiguous. If firms employ mature technologies this may mean that the demand level is such that additional new capacity is not required, in which case the considerations referred to earlier in relation to stagnant or moderate demand will apply. However the balance between technical innovation and stability is always shifting. This is especially the case in markets in sectors such as telecommunications, where there are continuing fundamental technological changes that affect technical innovation, cost, market relationships and demand. On this alternative view, relative lack of technical innovation, unless related to low or declining demand, may mean that

259 Ibid, 14
260 ‘...market shares are largely endogenous.’ Ibid, 15
261 Ibid
the specific market has yet to be addressed in the course of an innovation and application cycle.

The criterion was rightly deleted from the 2009 list because of ambiguity. It might be also be argued that, subject to precise meaning, it should not be applied to any electronic communications market given the high probability of major and disruptive technological and demand changes that have occurred over the past 30 years and which are set to continue.

Absence of excess capacity (deleted from 2009 list)

Firms typically carry excess capacity in order to enable them to satisfy demand acquired in the course of competing in the market. Without the capacity to handle new demand there is little point in competing. Therefore the absence of excess capacity, other than for very short periods, would seem to indicate a policy of non-competition, and might be the basis for collusion in the future.

Firms with capacity constraints have less to gain from undercutting rivals in the market because they are not in a position to serve the demand that has switched to them as a result. On the other hand, firms with capacity constraints have limited ability to punish deviations. So, capacity constraints are ambiguous for collusion. They create incentives not to compete on price, but they reduce the ability to enforce, through punishing deviations, the common policy that might result.262 The ambiguity alone may be a sufficient reason to take capacity constraints off the list of criteria.

High barriers to entry (retained on 2009 list)

This criterion is critically important and has been retained in the 2009 list. If there are low barriers to market entry then, once high profits are recorded, whether due to collusion or not, new entry will be encouraged. Under these circumstances collusion would not be sustainable. More importantly, as noted by Ivaldi et al, low entry barriers would tempt firms already operating in the market to undercut because retaliatory mechanisms would be weaker with the prospect of future profits. A short run approach may therefore be rational.263 The reverse also applies. High barriers to entry will deter entrants and affirm the likely impact of retaliatory mechanisms for deviation.

262 Ibid, 41
263 Ibid, 16
Lack of countervailing buying power (retained on 2009 list)

Firms supplying goods or services in a market will find it difficult to sustain collusive arrangements if customers have significant countervailing buying power. If there is a powerful customer that accounts for a large part of the market consumption then this will break down the agreements that may exist amongst suppliers, particularly if their commercial survival in the market is dependent on obtaining a share of that customer’s business.

The existence of very large customers who account for a large proportion of total market demand is not of itself sufficient to disrupt potential collusion amongst suppliers. The customer has to purchase strategically to exercise the countervailing buying power; otherwise the large customer will have no more impact than a collection of small orders. As an example, Scherer described the practice of the US Government of buying vaccines in bulk as an anti-collusion measure aimed at the pharmaceutical industry.

This criterion is relevant and important and its retention in the list is appropriate.

Lack of potential competition (retained on 2009 list)

The existence or lack of potential competition is an important criterion and has been retained on the 2009 list. If firms that operate in a related or adjoining market, whether geographically or functionally defined, do not have the skill, capacity and other resources to divert production to serving the relevant market in the short to medium term then there will be no new entry to that market in the short term and therefore no potential competition to be considered in relation to this criterion. This means that there will be no potential entrants to respond in the short to medium term to price increases in the relevant market. However economists, and particularly those from the Chicago school, have tended to place considerable store by the influence of potential

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264 This is equally effective where the customer accounts for a large part of the demand at a given time. This occurs when a customer seeks bids for a large multi-year contract.

265 See also Snyder, C M, ‘A Dynamic Theory of Countervailing Power’, (1996), 27 (4) Rand Journal of Economics, 747-769: Snyder’s model of an infinitely repeated procurement auction with one buyer and several sellers, shows that the accumulation of orders by a buyer may force the sellers to collude on a low price to prevent underselling, and may, over time, constrain the extent of collusion.


267 See later in this chapter
competition – and the notion of contestability of markets - in controlling excessive prices or reduced production by monopolists or duopolists in markets.268

With convergence becoming increasingly manifest in the telecommunications and related sectors,269 the specific importance of potential competition may well be greater than for other markets less affected by fundamental technological change.

Dasgupta and Stiglitz noted that as a constraint on behaviour by incumbents, potential competition may have been over-stated, since its effectiveness depends on the level of sunk costs associated with entry to the market; the higher the level of sunk costs, the lower the likelihood and effect of potential competition.270

Retention is justified, notwithstanding the need to analyse in each case the likelihood of potential competition. This is particularly important in the electronic communication sector where the dynamics of convergence are transforming firms, and their relationships to markets and to each other, rapidly.

Retaliatory mechanism (deleted from 2009 list)

At the time of the 2002 list of criteria for collective dominance it was considered to be important that there be a mechanism to enable effective retaliation against “cheating” by any of the colluding competitors, and to dissuade behaviour that deviated from the common purpose. Without such a mechanism it was considered that collusion would not be sustainable.271

It is not clear why this criterion was deleted from the list in 2009. A possible justification is that the mechanism need not be purely retaliatory in character to dissuade colluding firms from deviating from the common purpose of goal. The incentives for continued

268 Dasgupta, P and J E Stiglitz, ‘Potential Competition, Actual Competition, and Economic Welfare’, (1988) 32 European Economic Review, 569, 570: The authors refer to the belief that “[p]otential competition, not actual competition, was all that was required to ensure both efficiency and that the gains from efficiency would be passed along to consumers.”

269 Convergence in the telecommunications sector refers to the separation of services (and applications) from platforms so that the same services are available across different platforms and media, and the same media or platforms support multiple-services (thereby becoming multi-media platforms). This is in contrast to earlier periods of the sector’s development when service-specific platforms, networks and media were the result of the technologies in use at the time. The result is substantially increased inter-modal competition for services.

270 Ibid, 571: “...if there are even small sunk costs, potential competition may not be effective in ensuring either that profits go to zero or that efficient outcomes obtain.”

271 Ivaldi et al (2003), op. cit. 5: “Tacit collusion can arise when firms interact repeatedly. They must then be able to maintain higher prices by tacitly agreeing that any deviation from the collusive path would trigger some retaliation. For being sustainable, retaliation must be sufficiently likely and costly to outweigh the short-term benefits from ‘cheating’ on the collusive path.”
adherence to a common policy and the loss of the advantages that accompany adherence if there is a deviation might conceivably be sufficiently strong to have equivalent effect to any retaliatory mechanism. However in that case, the argument would not be for deletion of the criterion from the 2009 list, but, rather, expanding the criterion to cover both retaliation and strong incentives for adherence to the collusive arrangement.

*Lack of or reduced scope for price competition (deleted from 2009 list)*

Observers typically look for price competition in order to test whether a market is competitive. If the scope for price competition is reduced, such as when demand is saturated, and there is no significant new demand to justify investment in new and more efficient plant or infrastructure, then conditions of the kind that facilitate collusion may arise. However, competition may take forms other than price and still be effective. For example, it might be in terms of capacity or in terms of other dimensions of products that are valued by customers.

Lack or reduced scope for price competition might be consistent with collusion, but it is also consistent with effective competition, especially in the short term when temporary price equilibrium may have been achieved. For example, if the market competitors have competed away margins and offer services at prices close to incremental cost, then they may separately choose to compete on non-price factors, such as capacity or brand reputation. Such a result would be consistent with the market being effectively competitive. Under these circumstances deletion of the criterion from the 2009 list would appear to be justified.

**The Harvard and Chicago schools of economics**

Another way of examining the development of economic theories about oligopoly issues and collusion in markets is by examining the broader clash of perspectives, and the clustering of like-minded economists and their views at various points in time.

The original or “classical” view of the oligopoly problem in the United States has since become known as the Harvard school,272 in part to distinguish it from the views that later became associated with the Chicago School of Economics.

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From the 1960s many economists, such as Knight, Friedman, Posner and Stigler, who were at one time or another associated with the School of Economics in the University of Chicago, developed theories of economics that challenged the prevailing orthodoxy, especially in relation to the aims of competition policy and the public policy measures that should be adopted or avoided to achieve those aims.

A number of economists, particularly in the United States, and particularly associated with the Chicago School of Economics, were concerned to clarify that the purpose of competition policy (or antitrust) was to promote efficiency. As Blake and Jones put the matter in 1965:

> We have no quarrel with the view that effectively competitive markets promote economic well-being by (a) allocating resources to uses for which they are best suited in maximising consumer satisfaction, (b) encouraging efficiency and progressiveness in the utilization of resources, and (c) minimising maldistributions of wealth by forestalling sustained exactions of prices unrelated to costs.\(^\text{273}\)

However Blake and Jones considered that competition policy was intended to do more than ensure economic efficiency, and that competitive markets “advance several extremely important political objectives”.\(^\text{274}\) The most important of those additional political objectives, according to Blake and Jones, was that the competitive process “makes possible the attainment of a viable economy with a minimum of political interference. It largely polices itself.”\(^\text{275}\)

In contrast with a theory that sees competition policy as delivering public welfare through promoting efficiency, earlier approaches considered that competition policy advanced public welfare through other means. Posner, of the Chicago school,


\(^{274}\) Ibid, 382

\(^{275}\) Ibid, 382-3: “in short, antitrust operates to forestall concentrations of economic power which, if allowed to develop unhindered, would call for much more intrusive government supervision of the economy. Reliance on competitive markets accommodates our interest in material well-being with our distrust of concentrations of political and economic power in private or government hands.” It might be noted that Government power is a particularly American concern.
nominates these earlier theories as the public interest theory of regulation and the capture theory of regulation.\textsuperscript{276}

Of the public interest theory, Posner says that it is based on the argument that “the principal government interventions in the economy ... were simply responses of government to public demands for the rectification of palpable and remediable inefficiencies and inequities in the operation of the free market.”\textsuperscript{277} Posner argues that this theory cannot be correct, because government regulation extends well beyond addressing inefficiencies and inequities.\textsuperscript{278}

Posner notes that there are many versions of the capture theory of regulation, all of which involve “a process by which interest groups seek to promote their (private) interests.”\textsuperscript{279} Posner considers that one of the most usable theories of regulatory capture is “that over time the regulatory agencies come to be dominated by the industries regulated”.\textsuperscript{280} It is usable as a theory because it speaks not of interest groups at large, but of the regulated industry that is the captor.

However the capture theory is inadequate in Posner’s view because it cannot explain regulatory agency behaviour when there are competing groups in an industry (which is always the case).\textsuperscript{281} In addition, there is “a good deal of evidence that the interests promoted by regulatory agencies are frequently those of the customer groups rather than those of the regulated firms themselves.”\textsuperscript{282}

The public interest and capture theories were advanced to explain why regulation takes the form that it does and how it might depart from the purposes of competition policy which the agency was originally created to advance.

In contrast to such theories, Posner supports an economic theory of regulation, originally proposed by George Stigler, which “insists that regulation be explained as the
outcome of the forces of demand and supply.” In other words, there is a demand for intervention in markets and regulation is in response to that demand.

Posner’s approach, although interesting, is not a working hypothesis capable of definitive testing. Some regulatory behaviour and processes can be explained more compellingly using one or other of the theories that he discusses. Regulatory decisions are typically subject to appeal, and often subject to both administrative and judicial appeal. The appeal is concerned with the evidentiary and legal basis for a decision, and is not conducted in terms of a direct examination of the public or private interests served by the decision. It is very unlikely that the appeal tribunals and the courts will also be captured, as a matter of course, by the regulated firms of an individual industry. Therefore the capture theory is unlikely to explain the direction of oligopoly control in the longer term or the incentives that an administrative appeals tribunal or a court might respond to. The supply and demand theory, which Posner supported, may explain something about the circumstances in which regulation has been imposed on an industry, but the content of the regulation after initial establishment of regulation is far more heavily influenced by the legislative constraints and jurisprudence of the courts to which appeals are made on seminally important aspects of regulation.

Elzinga noted that economists sometimes divide the goals of antitrust policy into goals of efficiency and of equity. For Elzinga, “efficiency means the maximisation of the value of total output.” Residual political and social goals can then be categorised as equity goals. Amongst such equity goals Elzinga included the promotion of small business enterprise, expressed through high threshold tests for the approval of mergers. Elzinga’s conclusion is cautionary: “Interspersing any equity considerations that conflict with efficiency into antitrust should be done with trepidation.”

Posner described the basic tenet of the Chicago school as being that “problems of competition and monopoly should be analyzed using the tools of general economic

\[283\] Ibid, 344
\[285\] Ibid, 1192
\[286\] Ibid, 1196
\[287\] Ibid, 1213
theory rather than those of traditional industrial organization. A
He was of the view that this basic tenet had triumphed.

Areeda and Turner argued that the overriding goal of competition policy – or antitrust – is to maximise consumer welfare through the efficient allocation of resources. This was a fundamental tenet of the Chicago School. Hovenkamp, for example, confirmed that this was his view also:

The normative economic theory of law holds that an important function of law ought to be the promotion of efficiency. ... The idea that the goal of antitrust laws should be to allocate resources efficiently is simply one aspect of the normative economic theory of law.

Hovenkamp concluded however that there “might be some instances when this efficiency ought to be tempered by distributive concerns”.

Hovenkamp was concerned about how economic concepts might be adopted and applied in the administration of competition law. If the economy theory of competition is built on maximising economic efficiency, then it follows that there needs to be some precision in the idea of efficiency. He noted that there were many choices of definition, including whether an efficient state of affairs “contains more happiness or utility” compared to another state, “if it is Pareto superior” compared to that other state, or “if it contains more social wealth”. There is no general measure of happiness or utility that can be applied here that would be regarded as authoritative. Pareto superior refers to a state in which no further move is available which might make somebody better off whilst not making anybody worse off. This is potentially difficult to demonstrate or prove.

That leaves only one practical meaning for efficiency – namely whether a state of affairs is wealth maximizing. Wealth maximization is also a difficult concept to apply in practice, and any measure might lack the certainty that businesses require in a practical guideline for their commercial dealings. Hovenkamp notes that many distributive rules

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289 Ibid, 934
290 Areeda, P and D F Turner, Antitrust Law (Little, Brown and Company, Boston, 1978), 103
292 Ibid, 28
293 Ibid, 29
may turn out to be wealth maximizing when assessed in a Pareto sense. This means that even though it may be impossible to show that no consumer could be worse off, but at the same time the behaviour may well build towards overall (or aggregate) wealth maximization.

Easterbrook also belonged to the Chicago School. He considered that the structure-conduct-performance paradigm associated with classical economics of the Harvard School to be a model based on the notion of ‘perfect competition’ and not reflective of the way markets actually operate. However, historical association is not the same as a necessary linkage between concepts. There is no necessary connection between the paradigm and the atomistic model of perfect competition, and to attack the latter as being unrealistic does not overturn the paradigm.

For Easterbrook concentrated industries were efficient industries, according to industry data. Consequently the problem of oligopoly was less of an issue for him. In 1986 he made the claim that: “Today it is hard to find an economist who believes the old structure-conduct-performance paradigm.” It is possible that he was not looking too hard, because the law at the time and since, influenced by economic thinking, accords significant causal influence to structure (which constrains the range of possible market conduct) and, in turn, market performance. Nevertheless, Easterbrook was seeking to make the broader point that data for the relevant industry needs to be analysed to determine how the relationships might operate and to curb excessive predictions made about conduct and market performance on the basis of structure alone.

Easterbrook preferred to call the Chicago School the Workable Antitrust Policy School, because of misunderstandings of what the Chicago School was about. He offered eight points that characterised the school, in his view. These are set out with comments below:

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294 Ibid, 30
295 Ibid, 31
296 Frank H Easterbrook, former Professor of Law, University of Chicago, author of ‘The Limits of Antitrust’ (1984) 63 (1) Texas Law Review 1
297 Easterbrook, F H, ‘Workable Antitrust Policy’ (1986) 84 Michigan Law Review 1696, 1696-7: “...the structure-conduct-performance paradigm is just a longing for a world in which artisans made leather artifacts in tiny shops; it is not a useful way to think about real economics or a suitable source of proposals for antitrust policy.”
298 Ibid, 1697
299 Ibid, 1698
300 Ibid, 1700
301 Ibid
(1) No antitrust policy should be based on a belief that atomistic competition is better than some blend of cooperation and competition. The right blend varies from market to market.\(^\text{302}\)

This could hardly be a point of major difference with the classical or other schools when Easterbrook wrote or now. ‘Perfect competition’ was at best a notion for contrasting with actual markets. Easterbrook’s point appears to be that workable competition is not pure and may co-exist with cooperation or at least non-competition some of the time.

(2) No antitrust policy should be based on a belief that courts and other institutions of government can identify the ‘best’ structure of a market. The history of regulation demonstrates that intervention in pursuit of such goals will be unsuccessful or the playground of special interest groups.\(^\text{303}\)

Capture and related theories of regulation have been discussed earlier.\(^\text{304}\) Few regulators would seek to impose what they might consider to be a ‘best’ structure on a market. More likely, a regulator will recognise that certain structural characteristics in a market might facilitate collective dominance and the abuse of the position of economic strength that arises. In these circumstances, regulators may take action on an ex-ante basis to address the market failure, but in doing so they are not imposing a preferred or ‘best’ structure on an industry; rather they are making orders that address the structural characteristics that they find or the behaviour that they expect. They would accept that their role is to be as minimally intrusive as they can be whilst still effectively addressing the issues associated with the structure as it exists.

(3) Competition is hardier than you think. The desire to make a buck leads people to undermine monopolistic practices.\(^\text{305}\)

Presumably Easterbrook is talking of effective or workable competition here. Competition may well have been hardier than many thought in the period in which he was writing. However the forces that might be at work to foreclose competition or to maintain prices above a competitive level through collusive practices can also be hardy, and would also be driven by the same “desire to make a buck.” This principle adds nothing other than to anticipate that competition might survive despite the odds in hardened environments. The principle reflects the general opposition and scepticism of

\(^{302}\) Ibid
\(^{303}\) Ibid, 1700-1
\(^{304}\) In relation to Posner’s views of regulator capture by interest groups
\(^{305}\) Ibid, 1701
the Chicago school to regulatory intervention in the market. However there is no time-scale on the willingness or opportunity of new entrants to challenge monopolies and other incumbents so, in the absence of regulatory intervention, poor market outcomes may persist for long periods without effective constraints. In fact, the more embedded and powerful the incumbency, the less likely that it will be challenged by new entrants earlier rather than later.

(4) Practices that look monopolistic (because they involve cooperation) may be beneficial. Cooperation is essential in complex economic endeavours.\textsuperscript{306}

This would be a matter to be determined having regard to the specific circumstances applying to the market in question. Monopolistic and oligopolistic markets may achieve the full potential of scale economies, and the benefit might not be available if the sheer number of competitors condemned a market to sub-scale operation. There is clearly a point if this is Easterbrook’s meaning. However, even though allocative and productive efficiencies might be maximised, the sources of innovation are not necessarily in the small number of competitors who are the leaders in an oligopolistic market. Quite often smaller firms are innovative and need to be to survive. So whilst maximising static forms of efficiency market structures may actually limit dynamic efficiency. In high technology markets such as telecommunications innovation and the forces of dynamic efficiency are particularly important for industry growth and development.

(5) No antitrust policy may safely disregard the survival of complex practices. ...

Long-lived practices and structures should be displaced only if there is very sound evidence that they are damaging.\textsuperscript{307}

This criterion reflects a respectfulness for long-lived practices, often complex practices, that come before the courts and the tendency of the courts at various time in the history of antitrust to condemn practices based on a \textit{per se} rule. Easterbrook’s view is that such practices are not long-lived for nothing, and must be delivering a level of benefit to have survived so long. His point is that such practices deserve to be examined in detail to ensure that their removal will result in improvement in market performance.

Easterbrook explained the point in an earlier article when he wrote:

Reasoning of this sort [that is, prohibitions] has led to the condemnations – often under a \textit{per se} rule – of horizontal agreements by the dozen as well as tie-
ins, resale price maintenance, vertical territorial and customer restrictions, patent pools, block booking, and a host of other business practices. ... Economists have developed procompetitive explanations for all of these practices, sometimes several explanations for each practice. 308

It is not unusual for criteria to be ambiguous in relation to competition, and in these cases it is a matter for consideration, taking account of all relevant information from the market circumstances, how best to determine the balance between facilitation and obstruction of competition in a market.

(6) No question should be answered without adequate data. 309 This principle is difficult to argue against. Easterbrook appears to have in mind tie-in arrangements that need to be examined for pro- and anti-competitive outcomes. It seems to be a facile and obvious principle. However the concern that Easterbrook has relates to the easy application of the per se rules, especially in circumstances where adequate means are available to test the constraint proposed.

(7) Until we know what a durable business practice does, no one should prohibit the use of that practice. The costs of erroneous prohibitions ... are apt to be greater than the losses involved in waiting for better data and analysis before acting. 310 This principle seems to be no more than an outworking of the principles in (5) and (6). However Easterbrook was also drawing attention to the Chicago school’s abiding belief that regulatory oversight and failure to intervene will be picked up and addressed in time by the market itself, whereas the cost of errors and of incorrect emphases applied via the regulatory process are more likely to have more permanent adverse impacts on the market. The information and transaction costs of regulation are likely to be high. Easterbrook considered that errors of commission are likely to be both more severe and more permanent than errors of omission. This is a point of faith rather than a view based on evidence. It is more likely that both types of errors have the capacity to be severe with significant consequential effects.

308 Frank H Easterbrook, former Professor of Law, University of Chicago, author of ‘The Limits of Antitrust’ (1984) 63 Texas Law Review 1, 6
309 Easterbrook, F H, ‘Workable Antitrust Policy’ 1696, 1701
310 Ibid
(8) Until we know the costs of alternative forms of regulation, we should be patient. It is never right to compare the visible costs of reality against a presumed cost-free substitute.\(^\text{311}\)

This principle is a further rendering of the notion that regulation has costs that need to be borne by the plaintiff or the entire sector. There are always transaction costs for regulatory intervention. Simply because they are not always obvious does not make them unimportant. They are prone to be under-stated, however, because they are readily overlooked in full or in part. However, there are costs associated with inaction and protracted delay in regulatory intervention, so that a call for patience is not necessarily cost-free.

**Post Chicago School**

Writing in 1979, Posner noted that the distinction between the Chicago school and other schools of economics, such as the “Harvard” school (Posner’s quotation marks), “have greatly diminished”.\(^\text{312}\) He offered examples in the area of tie-ins and predatory pricing as evidence of broader adoption of a modified view, albeit a view based on the application of basic tools of general economic theory.

However there was one area in which Posner detected continuing disagreement and that was in relation to concentration and oligopoly. “The two schools continue to disagree over the significance of concentration and the wisdom of a policy of deconcentration.”\(^\text{313}\) The difference between the schools, according to Posner, is not that there is a positive correlation between concentration and profitability, which a number of studies had found, but the explanation for this correlation. In other words, why wouldn’t high profitability attract new entrants to the market?\(^\text{314}\) The Harvard School response was in terms of barriers to entry,\(^\text{315}\) but this response has specific problems for the Chicago School because, after Stigler, the only factor accepted as a barrier to entry is “a cost that differentially affects new entrants compared to firms

\(^{311}\) Ibid


\(^{313}\) Ibid, 944

\(^{314}\) Ibid, 944-5

\(^{315}\) For example, Bain (1986), op. cit., 24-5: “It follows that, among highly concentrated sellers seeking maximum joint profits, there should be a positive relation between price charged and the height if the barrier to entry, and thus between profit rates and height of entry barriers.”
already in the market. “The Chicago School, in contrast, found the answer to non-entry in scale economies or other factors that the incumbent would be able to leverage and which would deter entry.

Weiss criticised Stigler’s definition of a barrier to entry. He cited Stigler’s definition of barriers to entry as “costs of production that must be borne by entrants but not by firms already in the industry”. One element of Weiss’s criticism was that Stigler had focussed on an extreme case of continuously decreasing costs – that is, where returns to scale continue for much or all of the demand – or, as Weiss puts it, “the situation where costs decrease indefinitely as scale increases.”

It is not at all clear, however, that Stigler needed to extend the case to cost decreases on an indefinite basis for his point to be made. Secondly, there are cases of industries with high fixed capital costs that have the scale effects that Stigler has in mind, and fixed telecommunications network services is one of them. As discussed in Chapter 7, substantial scale economies attend mobile network service markets as well, although these are typically exhausted well before 100% of the demand in all but the smallest of national markets.

Hovenkamp also considered the state of antitrust post-Chicago. Writing in 1986 he said: "Today the cutting edge of antitrust scholarship is coming, not from protagonists of the Chicago School, but rather from its critics." The critics first refined the model and then uncovered anomalies in it.

Notwithstanding the important contribution of the Chicago school, Hovenkamp identified two defects:

First of all, the notion that public policymaking should be guided exclusively by a notion of efficiency based on the neoclassical market efficiency model is naïve. The notion both overstates the ability of the policymaker to apply such a model

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317 Ibid
319 Ibid, 1120, citing Stigler (1968) op. cit., 67
320 Ibid, 1121
322 Ibid, 216
323 Ibid, 283-4
to real world affairs and understates the complexity of the process by which the policymaker must select among competing policy values.

Second, the neoclassical market efficiency model is itself too simple to account for or to predict business firm behaviour in the real world. The model has proved to be particularly inept at identifying many forms of strategic behaviour. 324

Hovenkamp made the important point that the increasing complexity of explanatory models of anticompetitive behaviour since the heyday of the Chicago School, resulted from new insights into the operation of oligopolistic and non-competitive markets. But complexity also means that “the value of economic models begins to diminish in relative importance.” 325 At the same time, “the policymaker necessarily relies on values that lie outside the model”. 326 This means that economic efficiency, in his view, had ceased to provide an adequate rationale for testing competition in a market and an adequate basis on which to justify intervention and that social, political, or other criteria inevitably enter the equation.

Conclusion

This chapter shows that the work of both individual and groups (schools) of economists, particularly in the United States, shaped the development of economic concepts and of competition policy objectives in general, and the approaches that have been variously applied to the economic analysis of oligopoly and of concentrated markets in particular.

At all times the emphasis in economists’ views of appropriate approaches to markets has been in terms of outcomes – that is, the competitive performance of markets and their effectiveness in achieving the economic efficiency and related welfare goals that are regarded to be the objectives of competition policy.

The development of economic perspectives has not been a steady progression along particular lines of thought. At various times different economic theories have dominated the discussion ranging from notions of perfect competition, for which

324 Ibid, 260-1: “Strategic behaviour is conduct designed by the actor to reduce the attractiveness of the offers against which it must compete. ... In general, however, strategic behaviour is harmful and raises antitrust concerns when it reduces the attractiveness of the offers against which the strategizing firm must compete without producing substantial gains in productive efficiency to the strategizing firm.” The strategic behaviour under scrutiny includes predatory pricing.

325 Ibid, 284

326 Ibid
considerable potential economies of scale might be foregone, to essentially non-
interventionist approaches that held that markets are inherently self-correcting to a
degree not generally appreciated by economists or others, and that the equilibrium
around price and production that may develop in oligopolistic markets was essentially
unstable and would likely break down under its own pressure because of inherent
tensions and weaknesses without the need for regulatory, judicial or administrative
intervention by organs of the state.

In the United States a reaction occurred to the approach of the administration and the
courts to competition policy in the 1950s and 1960s. The approach at that time made it
unduly difficult to develop industrial scale through mergers and acquisitions, even when
the incremental concentration in the post-merger market could not have materially
lessened the level of competition. The reaction, which was largely associated with the
School of Economics at the University of Chicago, was also opposed to the development
of per se approaches to prohibited conduct. For example, orthodox approaches
suggested that predatory (or below cost) pricing should be prohibited per se, whereas
detailed empirical analysis suggested that it rarely occurred, or might even have pro-
competitive features under some circumstances.

The Chicago school considered that the objective of competition policy was to maximise
efficiency, and particularly allocative efficiency in the economy. The Chicago school
considered that markets were likely to be more competitive and self-healing than
previously thought and that, as a result, the need for regulatory or judicial intervention
to address oligopoly may also be far less than previous practice suggested.

Economists of the Chicago school and others developed a sceptical approach to the
benefits of regulatory intervention and about notions of tacit collusion. In time the
tenets of the Chicago school themselves were modified to accommodate new evidence
and new insights, including the renewed emphasis on the goals of competition policy
beyond static efficiency.

The economic approach to competition policy and case analysis has clearly left its mark,
permitting an objective means to develop for the assessment of parallel behaviour,
especially in oligopolistic markets, where no evidence of actual communication or
imputed agreement exists.
The foregoing chapter has tended to concentrate on the development of economic approaches to oligopoly and tacit collusion in the United States, leaving the specific developments in the European Union to be examined in Chapters 5 and 6.
Chapter 4: Legal Approaches to Oligopoly and Non-Competitive Markets

Introduction and the Explicit Agreement Paradigm

This chapter is concerned with how legal theory and judicial practice has shaped the way in which the problem of oligopoly has been framed, and the solutions that have arisen as a result. This chapter looks at legal concepts and their development in a number of jurisdictions, but, because developments in the European Union are the subject of Chapters 5 and 6, following, this chapter emphasises developments in other jurisdictions, particularly the United States.

The chapter will argue that the problem of non-competitive and sub-optimally competitive markets has been seen by legal scholars and jurists in terms that are analogous to explicit intentions and explicit agreements resulting in collusion between the suppliers in such markets. This is particularly the case in the United States where anti-trust legislation was built on the notion of criminal behaviour, the existence of which depended on proof of explicit intent – *mens rea* – and explicit agreements or understandings.

As will be argued below, the law addressed the issue of explicit collusion – cartelisation – in its earliest foray into this area. However, although that approach addressed explicit monopolisation and overt anti-competitive agreements and understandings between market participants, it did not address the concerns about market outcomes where the participants were apparently not trying to compete, or where they appeared, in the absence of any agreement, to have adopted a common view on the terms on which they would operate and deal with new entrants.

It will be argued in this chapter that the courts and legal commentators adopted approaches analogous to explicit collusion to deal with such cases. In the absence of explicit agreement or an explicit understanding, there arose a need to show that the circumstances of the market and its structure facilitated a coordinated or cooperative approach by the participants, and that the participants were thereby in a position of collective economic strength in the market sufficient to enforce their common goals. In such circumstances the participants either have acted or could be expected to act as if they had an agreement to behave cooperatively, and as if their common intention or purpose was express.
This chapter will show that the approach to tacit collusion and collective dominance developed from a starting position where purpose or intentionality was express, and that, over time, the notion of intentionality became a matter of inference from known facts about the structure of the market. Although the language of cooperation might be maintained in terms such as “tacit collusion,” the substance of the matter was, over time, sufficiently reflected in probabilistic, rather than deterministic, analysis.

Put another way, those alleging tacit collusion need not show that there was an agreement to collude (for then the collusion would not be tacit), or evidence of the clear intent to achieve collusive outcomes, as they would need to show if the allegation was of cartelisation. The firms involved would naturally ensure that there would be no evidence of an agreement, written contract or records of communications between them. Where the allegation is that there was an explicit agreement or understanding, the available evidence would be assessed to answer the question; Did these parties collude by entering into an agreement with each other? Where the allegation is of tacit collusion, the question becomes probabilistic: Given the market structure, the similarity (parallelism) of the firms’ behaviour, and the non-competitive outcomes, can we say in all likelihood that the firms have adopted a common position, almost as if they had an agreement, and are not competing with each other in some important ways, such as on price or quality, as a result?

Lastly, the chapter will conclude that the prevailing paradigm, based on explicit contractual agreement has shortcomings and cannot apply in the absence of collective dominance or in the absence of intentionality, whether constructive or implied. However, this leads us towards alternative, objective ways of justifying regulatory rather than to pursue collective dominance as the prime means for doing so. We have already in Chapter 3 flagged the importance of addressing non-performing markets especially where they are central to economic and social development. If collective dominance and tacit collusion are shown to be poor instruments for doing this on a predictable, reliable basis, then non-intentional approaches need to be considered, or the problems and issues associated with non-performing markets will be left unaddressed.
Collusion and cartelisation

In the United States the passage of the *Sherman Act* was the pre-eminent legislation for the promotion of competition in the late nineteenth century. Section 1 of the Act provides:

> Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal.

Section 2 provides:

> Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanor...

A number of important observations may be made about these provisions in the *Sherman Act*.

Firstly, by regarding the breach of the prohibition as a misdemeanour the *Sherman Act* creates a situation in which the prosecution must show *mens rea*, or an intention to perform the prohibited act or conduct. American anti-trust has struggled to develop alternative approaches based on an objective view of the market characteristics and of the behavioural outcomes that might result.

Second, the prohibitions in the *Sherman Act* relate to single behaviour as well as collective behaviour. Section 2 refers to persons who “combine or conspire with any other person or persons”.

Third, the language of Sections 1 and 2 is very broad, referring as it does to “restraint of trade” generally and “monopolisation” generally. This left considerable room for interpretation by the courts, and also allowed, over time, for competition policy to be shaped by more generally, including by economists.

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327 *Sherman Act*, (1890) U.S. Chap. 647, 26 Stat. 209
328 Both Sections 1 and 2 create felonies in US law
329 Kovacic, W E and C Shapiro, ‘Antitrust Policy: A Century of Economic and Legal Thinking,’ (2000) 14 *Journal of Economic Perspectives*, Issue 1, 43: “By these open-ended commands, Congress gave federal judges extraordinary power to draw lines between acceptable cooperation and illegal collusion, between vigorous competition and unlawful monopolization. … By enlisting the courts to elaborate the Sherman Act’s broad commands, Congress also gave economists a singular opportunity to shape competition policy.”
Fourth, and most important for present purposes, Section 1 has as its focus the notion of contract as it applies in everyday commerce, as well as the notion of conspiracy which need not be reflected in a contract or agreement.

The notion of explicit agreement or understanding therefore is based squarely in the notions of contract and intent. While tacit collusion has broken from the moorings provided by the concept of explicit agreement, the concept of explicit agreement has remained a template for the analysis of all forms of market cooperation between competitors.

Achievement of competitive market outcomes can be thwarted by the collusive action of market participants who find it more profitable to cooperate with their competitors, or some of them, rather than to compete. There may well be explicit agreements or understandings arrived at between market participants to divide the market through customer allocation, through market share allocation, or through price agreements. This view of cartel behaviour informs the fundamental conception of collusion, where the parties have actually arrived at a common policy intention about managing the market and have agreed on arrangements to implement that policy. This is the prototypical situation that Section 1 of the Sherman Act is designed to address. However, the concern was not necessarily concern that colluding firms would raise prices, but, rather, that through improved scale economies they might have the ability to reduce prices and therefore force smaller, less efficient operators out of business.\footnote{Dilorenzo, T J, "The Origins of Antitrust: An Interest-Group Perspective", (1985) 5 International Review of Law and Economics, 73, 80-1: "Perhaps the most widely-attacked trusts were those that existed in the sugar and petroleum industries. But there is evidence that the effect of these combinations and mergers was to reduce the prices of sugar and petroleum. ...the Congress acknowledged that combinations were actually responsible for improving the lot of the consumer by dropping prices 'immensely'. They objected, however, to the fact that less efficient (smaller) businessmen ('honest men') were driven out of business."}

In this basic scenario, competition\footnote{Ibid. Possibly seen in terms of the number of competitors at the time of the passage of the Sherman Act} cannot operate because it is subverted by the intention of some market participants.

Where there is a clear statutory prohibition – as in the case of the Sherman Act – prohibiting contracts or agreements in restraint of trade then firms will go to some lengths to avoid creating evidence that might suggest that such an agreement has been reached. They might work through industry associations to achieve the same ends in relation to price setting or market partitioning,\footnote{In the US during the First World War and the 1920s there was strong Administration support for industry organising through trade associations. Kovacic and Shapiro, (2000) op.cit. 46: "The associationalists} or they might work towards an
understanding using indirect means and without direct communication on the matter between them. In such circumstances collusion and cooperation will have gone “underground” and, if it does that effectively, there will be no direct evidence of a contract or an agreement. Proving the existence of collusion and cooperation will become reliant on identifying circumstantial evidence to show, indirectly, that no explanation other than collusion is compelling. The lack of direct evidence may show that collusion has effectively transformed itself into understandings that leave no evidentiary trace. Equally, of course, the lack of direct evidence may also mean that there is no collusion or understanding at all.

These distinctions, between collusion of any sort and none at all, are important for the law which is based on the prohibition of contracts and “combinations” that restrain trade. It is not only the objective – the restraint of trade – that is important, but the manner of its happening.

In the United States cases concerned with alleged vertical combination or conspiracy under the Sherman Act, involving potential conspiracies of a manufacturer and some distributors to terminate the contract of other distributors (usually in relation to retail price maintenance) are instructive of the evidentiary standard that has developed. In the Monsanto case, the Supreme Court held in favour of a distributor whose contract was not renewed by Monsanto, a manufacturer of pesticides and other chemicals used in agriculture. The Supreme Court affirmed the notion that if there is some evidence that the manufacturer has acted for its own commercial reasons, then the fact that competing distributors may have complained about the plaintiff will be insufficient to establish a conspiracy or combination.333

In the subsequent Matsushita case334, which involved issues of conspiracy amongst manufacturers of television sets, the Supreme Court stated that “a plaintiff seeking damages for a violation of §1 [of the Sherman Act] must present evidence ‘that tends to exclude the possibility’ that the alleged conspirators acted independently .... Respondents in this case, in other words, must show that the inference of conspiracy is

received strong support from Herbert Hoover who, as Secretary of Commerce and as President, urged businesses to cooperate through trade associations to exchange information and curb the wasteful features of competition.”

334 Matsushita Electric Industrial Co. v Zenith Radio Corporation, (1986) 475 U.S. 574
reasonable in light of the competing inferences of independent action or collusive action that could not have harmed respondents.\textsuperscript{335}

The cases therefore, being concerned with violations of statute that establish felonies and triple damages, are especially concerned about the evidentiary standard and what might reasonably be drawn as strong inferences from evidence that is mostly contextual and circumstantial. In contrast, economics and economic theory is concerned only with market performance as an end result; that there has been a restraint of trade and that markets are not able to operate freely and without interference by competitors who are determined to shape market outcomes directly rather than through competition on the merits. In economic terms there is no difference between a market that has failed because of explicit contracts and agreements between competitors and one that has failed because of implicit agreements and understandings between the competitors. The point may be taken further. There is also no difference in economic terms if the market has failed to be competitive because of cartelisation and has failed because the participants are individually adopting a passive approach, each paralleling the behaviour of other participants and not disrupting a price or capacity equilibrium.

**Collective Dominance**

The *Sherman Act* clearly recognised that competitors in markets might gain market power through collective or cooperative arrangements. The term “combination” is one such clear indicator.

Regulators may have to determine whether a market is effectively competitive, in which case there will be no justification for intervening to modify the way it works, or whether it has a structure that makes it susceptible to the exercise of market power by one or more competitors. Sectoral regulators may well be empowered by their statutes to intervene in markets ex-ante.\textsuperscript{336} That is, they may intervene before any anti-competitive outcomes have occurred and before any competitor has behaved in an anti-competitive manner that needs to be addressed. They may intervene if the market is likely, on their

\textsuperscript{335} Ibid, 588

analysis, to give rise to dominance by a single firm or to collective dominance by two or more firms.

A determination that competitors are collectively dominant is an assessment made by the regulator that the circumstances of the market and its structural characteristics are such as to suggest a material risk of collusion. In making the judgment the regulator need not be particularly concerned whether, if it is realised, the outcome is explicit collusion or implicit or tacit collusion. From an economic perspective the outcomes for competition are the same. Nor is the assessment of risk likely to be put to the test. If the assessment is that the risk is significant and warrants ex-ante regulatory intervention, then, assuming the intervention is effective, collusion will not occur and the risk will not materialise.

The significance of this is that traditionally, the law and regulation are concerned with agency and the intentions of the parties that are behaving in a collective or cooperative manner. This is especially the case in judging actual behaviour after the event or ex post. For example, in the Airtours Case, which will be discussed in greater detail in Chapter 6, the Court of First Instance defined collective dominance as tacit coordination that:

... would make each member of the dominant oligopoly, as it becomes aware of common interests, consider it possible, economically rational, and hence preferable, to adopt on a lasting basis a common policy on the market with the aim of selling above competitive prices, without having to enter into an agreement or resort to a concerted practice ...

Clearly there is a subjective element in the formulation and a sense of intentionality is conveyed by the terms “becomes aware”, “[each member] considers [various things]”, and “adopt ... a common policy”. In whatever ways the concepts might develop from that point onwards, they have clear origins in actual knowledge and intent.

Intention

Intentionality is at the heart of the explicit collusion between firms that was a prime target for the Sherman Act. Breach of the Act was a criminal matter and therefore the need for mens rea applied. With the American situation in mind, Filippelli notes that

337 Airtours plc v Commission of the European Communities [2002] 5 C.M.L.R. 7
338 Ibid, [62]
“Antitrust enforcement against parallelism is framed in the rule addressing cartels, as in this case proof of consciousness or intention is properly a requirement for the inference itself of infringements.”  

She also notes that “Section 1 [of the Sherman Act] is built around the concept of agreement; therefore, conduct falling within this provision must present elements of intentionality or, at least, consciousness of the action.”

With the basic concept of collusion and the characteristic of intent still in mind, attention quickly turned, in cases where explicit agreement was absent, to circumstantial evidence that might suggest an inference of an agreement or understanding or a “meeting of the minds” between market participants.

Agreements and understandings, in the sense known in contract law, follow communications. The passage of legislation such as the Sherman Act and equivalents in other jurisdictions meant that other forms of communication would be preferred by competitors because they leave less of an evidentiary trail. Oral communication could be effective, but one or other of the parties, or observers, might be prepared to speak out in court at a later time, when circumstances change and different incentives might apply. Various forms of signalling might also be appropriate which operated without written or oral language communication. In other words, the situations sought to be covered by collusion became increasingly attenuated compared to the template of explicit agreement or understanding built on language-based communication. Increasingly, the process of inferring the intentionality of the parties and their adoption of a common policy also becomes stretched.

The important point to note here is that intentionality and conscious adoption of a cooperative market approach were not dispensed with in the legal development of collective dominance and tacit collusion. They simply became formalities, without the substance suggested in overt agreements and explicit direct communication, and existed through inference from the circumstances of the particular market and the impact of whatever behaviour could be observed.


Ibid, 31

Ibid, 5: “… all the Supreme Court’s doctrines developed under Section 1 deal with the aim of showing, either directly or indirectly, the existence of the meeting of minds or the conscious choice of a common course of action behind anticompetitive parallelism.”

Discussed further below under Plus Factors and Facilitating Practices
Signalling and inferring agreements from circumstantial evidence

In the *Interstate Circuit*\(^{343}\) case the US Supreme Court considered the situation in which two related theatre exhibitors suggested by mail to distributors that first-run films should be shown without a second feature and that the prices for tickets to subsequent-run films should be increased. The advice was followed by distributors in most of the areas of Texas in which the advice was distributed. The Supreme Court was prepared to consider circumstantial evidence to hold that there was an unlawful conspiracy contrary to the prevailing view at the time that direct proof of an agreement was necessary. Here there was no agreement, but there was compliance with a request. The Supreme Court stated: “It was enough that, knowing that concerted action was contemplated and invited, the distributors gave their adherence to the scheme and participated in it. Each distributor was advised that the others were asked to participate; each knew that cooperation was essential to successful operation of the plan.”\(^{344}\)

In *Interstate Circuit* the circumstances were fairly clear and included a written document suggesting exactly what behaviour was being requested of distributors. The signalling, if the written request could be called that, was by a third party, not a distributor, but adherence to the request was taken to be an effective agreement amongst the distributors.

The unusual feature of *Interstate Circuit* is that there was a single request and a single response involved and not the recurring opportunities to coordinate that arise in game situations with repeated transactions, and with multiple interactions over the course of those repeated transactions.\(^{345}\) Nevertheless the industry structure was well established and the parties and their interests were well known to each other.

To some extent, signalling is unavoidable in many markets, especially in retail markets where consumer attention needs to be gained through advertising price levels or other advantages of owning the product or subscribing to the service being offered. If prices and other terms are advertised to catch the consumers’ attention, the information will have been communicated, or signalled, to competitors as well. Something more than signalling is usually required for imputing intention to cooperate, such as the course of competitor behaviour over a period, include parallel pricing, and price levels that have

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\(^{343}\) *Interstate Circuit v United States* (1939) 306 U.S. 208  
\(^{344}\) Ibid, 226  
\(^{345}\) See above Footnote 196 and following discussion.
been maintained above competitive levels without any other explanation than tacit collusion.\textsuperscript{346}

Because of legislation such as the \textit{Sherman Act} and TFEU\textsuperscript{347} explicit agreements which reflect an intention or have the effect of managing the market are prohibited. It is therefore to be expected that any concerted practices are likely to be covered up so as not to leave an evidence trail which might assist both detection and prosecution. The competitors concerned might therefore develop various ways of signalling their intentions that do not involve written or oral communication.

For example, as noted above, competitors might use normal advertising channels, such as print and electronic media, or even physical media such as signage, not only to advise customers of the prices that they are offering, but also to signal to their competitors.

These situations are of no direct interest for the purposes of this thesis, because they are only ways and means of avoiding leaving evidence of actual agreement. If the competitors can be shown to be signalling in this way, then it is not tacit collusion that should be found to be occurring, but direct and explicit collusion.

The situations that are of interest are those in which elements of market structure are present which might be sufficient for consciously parallel behaviour to be better explained as coordinated and as the implementation of a truly common purpose, rather than as a series of independent behaviours adopted separately by the competitors involved.

\textbf{Parallel Behaviour without more}

If there is no communication between the competitors or no form of explicit agreement, and the pricing and other market behaviour of the competitors is similar (or parallel), it is open for the behaviour of the parties to be considered to be no more than conscious parallelism – that is interdependent behaviour determined by each of the competitors acting alone but with full awareness of the likely response from other competitors to

\textsuperscript{346} In Monsanto Co v Spray-Rite Service Corp ((1984) 465 U.S. 752, 768: “the correct standard is that there must be evidence that tends to exclude the possibility of independent action ... That is, there must be direct or circumstantial evidence to a common scheme designed to achieve an unlawful objective.”

\textsuperscript{347} TFEU, Article 101 prohibits “all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market, and in particular those which: (a) directly or indirectly fix purchase or selling prices or any other trading conditions;...”
pricing or other competitive initiatives – and it is also open for the behaviour to be considered to be the implementation of a common policy that has the effect of delivering above-competitive prices and profits. The second of these possibilities is tacit collusion. A conclusion that there is tacit collusion will be justification for regulatory intervention; a conclusion that the behaviour is purely conscious parallelism will not, as far as the law is concerned.

The words that might be used to discuss these alternatives can easily become suggestive of the outcome and therefore become theory-laden. For example, to conclude that the parallel behaviour is the implementation of a common policy or a common purpose is to use terms that are laden with suggestions of agreement, because the adoption of common purposes is usually a matter of agreement. The term connotes a ‘shared purpose’. If more neutral and less suggestive language were to be used, then the purposes of the various competitors might be considered to be “similar”, without any suggestion of agreement or shared intent.

In *Theatre Enterprises*,\(^{348}\) US Supreme Court Justice Clark noted that “‘conscious parallelism’ has not yet read conspiracy out of the Sherman Act entirely”\(^{349}\), and further noted that circumstantial evidence, such as “business behaviour” may enable agreement to be inferred.\(^{350}\)

The notion is that additional factors might exist in particular cases which enable the parallel behaviour to be more rigorously examined in the circumstances in which it occurred. Such an examination may justify a conclusion that the behaviour was more than merely parallel, and that it was part of a cooperative arrangement between the competitors concerned.\(^{351}\)

**Plus factors and facilitating practices**

If one or more facilitating factors are present, that might assist in describing a situation as involving more than parallel behaviour. However, the existence of such factors is not

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\(^{348}\) *Theatre Enterprises v Paramount Film Distribution Corporation* (1954) 346 U.S. 537

\(^{349}\) Ibid, 541

\(^{350}\) Ibid, 540

\(^{351}\) “…there must be direct or circumstantial evidence that reasonably tends to prove that [the parties] had a conscious commitment to a common scheme designed to achieve an unlawful objective.” *Monsanto Co. v. Spray-Rite service Corp.*, (1984) 465 U.S. 752, 768
determinative of the matter. Such was the finding of the US Court of Appeals in the Du Pont Case in 1984.\textsuperscript{352}

In that case, Du Pont and Ethyl Corporations, both suppliers of antiknock petroleum additives sought a review of an order of the US Federal Trade Commission (FTC). The FTC determined that they, and two other manufacturers of these products, had engaged in unfair methods of competition contrary to Section 5 of the Federal Trade Commission Act.\textsuperscript{353} The facilitating practices were the sale of the product at delivered prices which included transportation costs, the provision of additional notice (over the 30 days provided for in customer contracts) of price increases by the appellant firms, and the use of a “most favoured nation” clause by the appellants and one other firm. These practices were followed by Ethyl Corporation when it was the sole supplier, prior to 1948. The market was in decline because of a range of factors outside the control of the four firms in the industry, largely because of the public policy to remove lead from petrol. Prices in the industry were supra-competitive, and much competition was in terms of non-price factors including the provision of special services to the petroleum industry.\textsuperscript{354}

The FTC concluded that the structure of the industry – with “high concentration, high barriers to entry, a homogenous product and inelastic demand”\textsuperscript{355} – rendered it susceptible to unilateral but interdependent conduct which lessened competition. The FTC did not find any evidence of collusion or of anti-competitive intent or behaviour.

As Mansfield, J put it, on behalf of the majority of the 2\textsuperscript{nd} Circuit of the Federal Court of Appeal, “even though none of the practices by itself was an unfair method of competition, the FTC concluded that their cumulative effect was to reduce competition and that the practices thus contained unfair methods of competition in violation of the Act.”\textsuperscript{356} The FTC was, according to the Court, seeking to adopt an effects test, based on...

\textsuperscript{352} Ethyl Corp, (1983) 101 FTC 425, vacated \textit{E I Du Pont De Nemours & Co v FTC}, (1984) 729 F 2d 128 (2\textsuperscript{nd} Cir.)
\textsuperscript{353} Federal Trade Commission Act, 15 U.S.C. 45: The relevant part of Section 5 provides, “Unfair methods of competition in or affecting commerce, and unfair or deceptive practices in or affecting commerce, are declared unlawful.” §45(a)(1)
\textsuperscript{354} \textit{E I Du Pont De Nemours & Co v FTC}, (1984) 729 F 2d 128, 132-3
\textsuperscript{355} Ibid, 135
\textsuperscript{356} Ibid
whether the behaviour “results in a substantial lessening of competition”. In the event the Court would have none of it, and vacated the order.

The Court maintained some adherence to the contractual agreement paradigm and required something more than parallel behaviour, even if the result of the behaviour was supra-competitive profits.

From this perspective, the separate and partly dissenting judgment of Lumbard, J is interesting. He wanted to leave open the issue of whether the FTC might take action in an appropriate case “whether, as the FTC now argues, it extends also to conduct that may be acceptable in some situations but not in others, in light of poor industry structure and performance, substantial anticompetitive effects, and lack of offsetting procompetitive justification.” He later notes, on the scope of Section 5 of the FTC Act, that “Judge Mansfield [reflecting the majority opinion] does not appear to argue that § 5 by its terms cannot be construed to extend to noncollusive practices that facilitate oligopolistic pricing.”

Lumbard, J and the majority judges considered that the evidence of past behaviour and the nature of the market, involving some very powerful customers with substantial leverage, meant that there was considerable evidence of competition and also commercial justification for the practices that the FTC considered to be facilitating conduct. It would require a far more compelling case, therefore, for a court to intervene to prohibit ongoing facilitating practices in an oligopolistic market, or to hold that parallel pricing and other parallel behaviour was a violation of the Act.

The importance of this case is that the courts have considered circumstances in which they might move away from the explicit agreement paradigm and focus instead on the effects of oligopolistic behaviour, however caused, on the level of competition in a market.

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357 Ibid, 137
358 Ibid, 139: “In our view, before business conduct in an oligopolistic industry may be labelled “unfair” within the meaning of § 5 a minimum standard demands that, absent a tacit agreement, at least some indicia of oppressiveness must exist such as (1) evidence of anticompetitive intent or purpose on the part of the producer charged, or (2) the absence of an independent legitimate business reason for its conduct.”
359 Ibid, 142
360 Ibid
Ex-ante regulatory intervention and evidentiary standards

Regulators are typically empowered under their enabling legislation to take action in response to or in anticipation of market failure. This is the case, for example, with national regulatory authorities for telecommunications in the European Union.\(^{361}\) To take action only in response to anticompetitive behaviour, or ex post, may in some circumstances be too late, and much of the damage may have been sustained before analysis can be undertaken and before intervention can occur. In these circumstances the regulator may be able to determine from an examination of the structural features of the market that market power exists and that the opportunities for its abuse are significant. The structural features already referred to, such as concentration, relative size or market share of participants, barriers to entry and scale efficiencies, will all be relevant to an assessment of the market and its potential for sustainable competition. The linkages between these structural factors and single or collective dominance will have been established either in economic theory or by drawing on the experience of past association.

Ex-ante intervention is anticipatory, and is based on an assessment of the likelihood of behaviour constituting an abuse of dominance arising out of the market structure. Once a regulator intervenes on an ex-ante basis, it changes the market. The regulator will take some action to address the potential risk of harm from dominance. It will impose regulatory obligations on one or more market participants, and that will change the structure of the market and the ability of the market to sustain anti-competitive behaviour. The regulator might directly require that one or more market competitors should behave in a specified way, for example, by providing access or other specific services to other competitors,\(^{362}\) by prohibiting discriminatory behaviour, or by adjusting tariffs and prices to conform to a particular cost standard that reflects the costs in a competitive market.

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\(^{361}\) See Framework Directive (Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services) at [25]: “There is a need for ex-ante obligations in certain circumstances in order to ensure the development of a competitive market”; at [27]: “It is essential that ex-ante regulatory obligations should only be imposed where there is not effective competition”; and Article 16.4: “Where a national regulatory authority determines that a relevant market is not effectively competitive, it shall identify undertakings with significant market power on that market ... and ... shall on such undertakings impose appropriate specific regulatory obligations ...”

\(^{362}\) This occurs, for example, in the case of telecommunications, in relation to the provision of interconnection or other network access services. For example, in Australia, nbn, the company formerly known as the National Broadband Company, is required to provide a Special Access Undertaking, which the ACCC (the regulator) must either accept or reject under Section 152 CBD(2) of the Competition and Consumer Act, 2010 (CCA)
If these orders are effective and the risk of harm from abuse of dominance is averted, then it will be impossible to determine what would otherwise have happened if there had been no intervention. This raises the issue of the evidentiary standard to be achieved before ex-ante intervention may be justified, and whether this is the same standard that applies to ex post intervention by competition regulators.

Ex-ante intervention ultimately requires a forecast to be made; namely, that in the absence of regulatory intervention there is a substantial likelihood of behaviour based on market power that will lead to performance outcomes that are essentially non-competitive. The assessment cannot be unqualified; at best it can only be probabilistic. Even the initial determination of dominance must be based on the existence of factors, none of which is determinative either individually or in combination.\(^{363}\) A civil law standard of proof would therefore seem to be the highest standard that could apply in these circumstances based on the balance of probabilities.\(^{364}\)

Ex-ante intervention would seem to be justified on a lower standard of proof than ex post intervention which is in response to market behaviour.\(^{365}\) In the case of abuse of dominance resulting in ex post intervention, there would be proof of actual behaviour and a basis on which to characterise it as an abuse of market power. With ex-ante prediction all that exists is a structure that is considered likely to facilitate the exercise of market power. The circumstances of the cases are always different in this respect. Probabilistic analysis can be plausible or not, but it cannot be proven in the same sense that actual behaviour is a matter that lends itself to be proven. Filippelli argues, however, that even with ex post intervention there is still the need in relation to the conduct in question “to predict whether or not it could generate an anticompetitive effect.”\(^{366}\) The main difference, according to Filippelli, may be “the quality of evidence required to persuade the judge: in the cases of abuses, the [regulator] may base this demonstration upon historical and objective data, which are, by definition, more reliable

\(^{363}\) Clearly recognised by the European Commission in its Draft Guidelines in Enforcement Priorities in Applying Article 82 EC to Abusive Exclusionary Conduct by Dominant Undertakings, COM(2008), [2009] 4 C.M.L.R. 14, [10]: “in general, a dominant position derives from a combination of several factors which, taken separately, are not necessarily determinative.”

\(^{364}\) Filippelli, M, Collective Dominance and Collusion: Parallelism in EU and US Competition Law (Edgar Elgar, London, 2013), 211. Filippelli considers that evidence is required “of significant plausibility” of collusion, that is, for evidence showing the high probability of infringement”, (in this case of Article 102 of the TFEU). She then notes that this is the standard “typical of civil proceedings”.

\(^{365}\) Ibid: “Most of the scholars reject the idea of symmetry in ex ante and ex post proof of collusion and remark on the opportunity of applying a higher standard of proof in abuses.”

\(^{366}\) Ibid, 212
than forecasts or expectation”.\(^{367}\) This view would be consistent with both ex-ante and ex post evidentiary standards being similar and of the kind applied in civil cases, based on the balance of probabilities, but with the balance being sustained by more robust evidence in the ex post cases.

Importantly the assessment of collective dominance is not a forecast that the risks will definitely be realised, but, rather, that there is a material possibility of that happening. The assessment could include possible ways in which the risk might materialise and possible incentives that are present to add detail to the apprehension. It is important for regulators to have a compelling narrative about the detail because the appropriate regulatory response will depend on those details. Ex ante regulatory intervention will need to be appropriate to address the nature of the risk and the manner in which it will likely materialise.

In assessing whether two or more firms hold a collectively dominant position in a market a regulator is expressing an expectation or anticipation, based on reasonable grounds, that in the absence of effective regulatory intervention the market has a material risk of cooperative or collusive behaviour which will have an adverse impact on competition in the market.

‘Reasonable anticipation’ means that the view of the potential outcome that is held by the regulator needs to be capable of being justified in a reasoned manner. A regulator will need to be able to identify structural characteristics of the market that would support such a conclusion, or to give it “significant plausibility”\(^{368}\), and to take into account considerations that are ambiguous or tend to support other conclusions.

Many different structural characteristics might have relevance to the issue of collective dominance and the likelihood of anti-competitive behaviour resulting. The weighting to be given to each and any structural characteristic will depend on the market concerned and the processes that have developed for interactions and transactional behaviour over time. Characteristics such as market share will differ in their importance from market to market.\(^{369}\) At the end of the process the regulator will need to have a compelling and

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\(^{367}\) Ibid

\(^{368}\) Ibid, 211

\(^{369}\) See, for example, F. Hoffmann-La Roche & Co AG v Commission of the European Communities [1979] 3 C.M.L.R.211, 275 [40]: “A substantial market share as evidence of the existence of a dominant position is not a constant factor and its importance varies from market to market according to the structure of those markets, especially as far as production, supply and demand are concerned.”
coherent narrative that reflects the circumstances of the market in question and takes into account available evidence. There is no requirement that all relevant criteria will point in the same direction, and they often will not. This means that ‘on balance’ judgments may need to be made, whether in relation to specific criteria or for the overall assessment that there will be a substantial lessening of competition, much is in the same way as regulators within the merger administration assess planned mergers.

When a regulator intervenes in a market ex-ante in the expectation that one or more dominant competitors might adopt collusive strategies there is always the possibility that the intervention may have been unnecessary and that the market might have developed in a competitive way. This would be a false positive, where intervention seemed to be called for, but in fact was not. In other situations the result might be a false negative; that is, where the regulator concluded that there was no basis for intervention or chose not to intervene, but where, in fact, intervention was both justified and needed to prevent a non-competitive outcome.

In some situations the implications of a false positive may be greater than for a false negative. This means that errors of regulatory commission may be considered to have greater importance than errors of regulatory omission, so that if a regulator mistakenly intervenes on an ex-ante basis in a market this could be more harmful overall than if the regulator mistakenly chooses not to intervene. This may be the case in some situations, particularly where there is some possibility of action being taken under competition law ex post in response to anticompetitive behaviour actually occurring. It may be that a regulator decides to leave an ambiguous situation for ex post attention should the problem be manifest in competitor behaviour and require attention at a later stage. Nevertheless the possibilities of error, especially where information is uncertain or ambiguous in some way, needs to be considered. Another way of putting this matter is that regulators should take care to properly consider all available information and likely consequences before they act, and should always consider forbearance and delay as options.

**Structural aspects of markets conducive to collective dominance**

During the period from the late 1970s the courts, particularly in the European Union, developed increasingly sophisticated approaches to analysing the structural characteristics of markets to determine which of those characteristics might be more
conducive to dominance in general and to collective dominance in particular. In the case of collective dominance, the courts examined the kinds of linkages that might facilitate cooperation in the pursuit of common policies for the market in question.

Various kinds of informal or other links between the undertakings concerned

Various links between firms, including outside the market in question, may strengthen incentives towards collusion and cooperation. These could take many different forms including commercial partnerships in other markets.

The European Court originally left open the question of whether structural or other links were necessary for a finding of collective dominance. However the matter was finally clarified in *Gencor*[^370] where it was determined that such links are not necessary.[^371] Nevertheless, if they exist, structural or other links may support a conclusion that cooperation or collusion is more likely than might otherwise be the case.[^372]

Retaliatory mechanism

At the time of the 2002 list of criteria for collective dominance in the European Union’s Framework Directive[^373], it was considered to be important that there be a mechanism to enable effective retaliation against “cheating” by any of the colluding competitors, and to deter behaviour that deviated from the common purpose. Without such a mechanism it was considered that collusion would not be sustainable.[^374]

In the Airtours Case[^375], the European Court of Justice annulled the Commission’s decision to disallow a merger because of the joint dominance that would result between the merged entity and the remaining large tour operators in the short-distance overseas vacation market. The Commission had taken the view that a “strict” retaliatory

[^370]: *Gencor v Commission*, [1999] ECR II-753. The case is more fully discussed in Chapter 5, above Footnote 452 and following.

[^371]: Prior to the Airtours case, the European Court of First Instance in *Kali-Salz* annulled a Commission decision on the basis that it did not sufficiently proved the alleged structural links, but left open the question of whether collective dominance may be found in the absence of structural links: Joined Cases c-68/94 AND c-30/95 *France and Others v Commission* [1998] ECR 1-1375. However in *Gencor v Commission* it was established that neither structural links nor active collusion are a prerequisite for a finding of collective dominance: [1999] ECR II-753

[^372]: As in *Kali-Salz*, above Footnote 525


[^374]: Ivaldi et al (2003), op. cit. 5: “Tacit collusion can arise when firms interact repeatedly. They must then be able to maintain higher prices by tacitly agreeing that any deviation from the collusive path would trigger some retaliation. For being sustainable, retaliation must be sufficiently likely and costly to outweigh the short-term benefits from ‘cheating’ on the collusive path.”

[^375]: *Airtours plc v Commission of the European Communities* [2002] E.C.R. II 2505
mechanism is not necessary for a finding of joint dominance.\textsuperscript{376} The Court held that there must be a retaliatory mechanism which serves as an incentive not to depart from the common policy. This is a precondition for a finding of collective dominance. Importantly however the Court did not determine that the retaliatory mechanism needed to take any particular form, only that it must be a sufficient deterrent against deviation or an encouragement to maintain a collusive or cooperative arrangement.\textsuperscript{377} It is an issue in each case whether the resumption of competition and the prospect of competing away margins are sufficient deterrents.

One might argue that Airtours had the effect of confirming the need for a sufficiently deterrent retaliatory mechanism for collective dominance, but that the case allowed for a wider range of mechanisms to be considered, so long as they were effective deterrents for cheating or effective inducements for compliance.

\textit{Lack or reduced scope for price competition}

The absence of price competition is ambiguous and not determinative of collusion. In each case an analysis will need to be undertaken taking account of the nature of competition on non-price factors and the potential for price competition given costs structures and margins.

\textbf{Conclusion}

The development of legal thinking about oligopolistic and non-competitive markets has been influenced heavily by the concept of explicit agreement where competitors agree or understand that they will adopt cooperative or collusive arrangements in preference to competition – particularly in preference to competition on price, but also in relation to other dimensions of competition.

Where there are no written or oral communications of the sort that typically support a commercial agreement, then various approaches developed that allowed an arrangement or understanding to be inferred. As discussed, these may take the form of structural or economic links. In time however, the requirement that such links need to be shown disappeared.

\textsuperscript{376} “Nor does it regard a strict retaliation mechanism ... as a necessary condition for collective dominance in this case; where, as here, there are strong incentives to reduce competitive action, coercion may be unnecessary.” \textit{Airtours/ First Choice} OJ 2000 L 93/1, paras 55 and 151-3

\textsuperscript{377} \textit{Airtours plc v Commission of the European Communities} [2002] E.C.R. II 2505, [191 – 207]
Lastly, and most importantly, the legal approach to oligopoly regulation has been concerned with the behaviour and intentions of the competitors more than with the market performance in terms of competitive outcomes. This is the critical and ongoing difference between the legal and economic perspectives on the matter, notwithstanding that other elements of economic thinking have influenced the development of the law on these issues.

The foregoing chapter has tended to concentrate on the development of judicial approaches to oligopoly and tacit collusion in the United States, leaving the specific developments in Europe to be examined in Chapters 5 and 6, following.
Chapter 5: Collective dominance and oligopoly regulation in Europe before *Airtours*

**Introduction**

The purpose of this chapter is to examine the development of the concept of collective dominance and of approaches to oligopoly regulation in the European courts before the *Airtours* case. The next chapter will deal with *Airtours* and developments after that, and explain why the CJEU’s judgment in *Airtours* and its later judgment in *Sony* were important for both collective dominance and for oligopoly regulation.

In Chapters 2 and 3 the notions of tacit collusion and collective dominance were discussed, together with the concepts of perfect, workable and effective competition. In this chapter those concepts are assumed, and the emphasis is on the way in which the European courts have developed and extended means of evaluating whether particular market situations may be assessed as cases of collective dominance or not.

The European Union is a jurisdiction where the relevant institutions have given the concept of collective dominance more attention than elsewhere. They have been aided in that process by the wording of Articles 101 and, especially, 102 of the TFEU. These provisions are considered later in this chapter.

I will show in this chapter that the European courts have moved cautiously in developing frameworks and criteria for examining collective dominance, starting with the notion of cartel collusion (but without explicit communications that were typically considered to be essential to the formation of cartel agreements and understandings) and moving to examine other relationships between market participants alleged to be operating cooperatively. The courts then concentrated on structural features and other indicators of collusive markets. In the process, intentionality has continued to be regarded as an essential element of tacit collusion, just as it is in the case of explicit collusion, but its role and the way in which it might be presented in judicial analysis has changed, commensurate with the lack of direct behavioural evidence of intent.

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Ex post and ex-ante intervention in markets

There are three types of situations in which the development of the concept of collective dominance has occurred. They are, firstly, development of the concept in the context of ex-ante sector specific regulation; secondly, in merger regulation, also ex-ante; and, thirdly, in the application of competition law to address anti-competitive behaviour on an ex post basis.

The European cases considered in this chapter relate to the second and third types of situations. Sector specific ex-ante regulation, particularly in the electronic communications sector, is examined in Chapter 7. In all three types of situations the same fundamental concept of collective dominance is in play, but the types of evidence available and the way in which situations are evaluated differs considerably.

In theory, sector specific regulation and merger administration are ex-ante interventions into markets by regulators based on anticipated outcomes, and the application of competition law remedies is to address behaviour that has occurred in the past and/or is still occurring. In the field of sector regulation, such as, for example, in the electronic communications sector, the regulator needs to determine whether a defined market is effectively competitive or whether it is characterised by the dominant position of one or more participants. If the latter, the regulator then determines the action that ought to be taken, if any, in anticipation of the behaviour that constitutes an abuse of that dominance occurring. The regulatory task is to analyse the structure of the market now and to determine the likelihood of that structurally-defined situation resulting in anti-competitive behaviour in the short to medium term. In effect the regulatory intervention changes the structure and the circumstances of the market to the extent that the regulator considers is sufficient and appropriate to reduce to acceptable levels the risk to competition posed by the assessed market dominance. Constraining the behaviour of the dominant competitor or competitors, such as through the imposition of regulatory obligations and prohibitions, is a structural change of this kind.

In the field of merger regulation, the regulator must examine whether the proposed merger will create or enhance a position of significant market power in future compared to the situation that would arise in the absence of the proposed merger. The regulator therefore must analyse the future market outcome by comparing the future market

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380 Competition law remedies may also address anticipated behaviour of the same kind that might otherwise continue into the future.
situation likely to arise with and without the proposed merger. Like sector regulation, merger regulation is based on a probabilistic methodology involving assessments of likely futures. However merger regulation has an added degree of difficulty because it involves the comparative assessment of two future market outcomes, not one.

By contrast, when competition law remedies are being applied, the regulator is concerned to establish whether behaviour has occurred that is unlawful. It may be that the agency needs first to establish that there is a position of significant economic strength or dominance in a market by one or more firms, and to characterise behaviour in the light of that position. The agency is intervening ex post in determining all of these matters.

A further issue arises when comparing the circumstances in which regulation, mergers and competition law enforcement occur, which reflect differences in the application of the evidentiary standard that inevitably occurs in determining the likelihood or future outcomes compared with determining what has happened after the event. The former is probabilistic based on the most likely or most plausible forecast and the latter is an investigation into what actually occurred. The justification for taking anticipatory regulatory action, including denial of merger approvals, is in terms of the probability of certain scenarios arising in future. There can be no test after the event as to whether the assessment that has led to ex-ante regulatory intervention was correct because the intervention will have changed the market circumstances.

**Articles 101 and 102 of the European Treaty**

The important provisions which form the basis for considerations of dominance, including collective dominance, under EU law are to be found in Articles 101 and 102 of

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382 France v Commission: In a merger case the Court concurred with the Commission’s view that “[w]ith Article 86 it is the past that must be referred to, whereas in the case of the regulation the analysis is directed to the future, its purpose being to maintain an effective competitive structure, not to put an end to an abuse of a dominant position.” [1998] 4 C.M.L.R 829 (Joined Cases c-68/94 & C-30/95)

383 However, if a regulator assesses market circumstances and decides not to intervene at all, either on the ground that the market is effectively competitive or that there is no sustainable collective dominant position, that can be tested. If the assessment was incorrect then the non-competitive character if the market will presumably become apparent over time. The ex post testing of ex-ante perspectives is therefore asymmetrical in its impact.
the TFEU. These Articles were formerly Articles 81 and 82, and, before that, Articles 85 and 86, respectively of the TFEU.\footnote{The Articles will be referred in case excerpts with the numbering at the time; otherwise as Articles 101 and 102, respectively.}

Article 101(1) provides:

The following shall be prohibited as incompatible with the internal market: all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market, and in particular those which ... [there follows a list of practices going to price fixing, market sharing, unfair discrimination and supplementary obligations].

Article 102 provides:

Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States.

Article 101 is intended to prohibit certain types of agreements, collective decisions and concerted practices that are intended to or have as their result prevention, restriction or distortion of competition. These agreements and practices need not be between firms that are dominant or, as a result of the behaviour, may become collectively dominant in a market. Article 101 applies to all such agreements with the requisite object or effect.

In contrast, Article 102 is concerned specifically with the abuse of a dominant position, whether by “one or more” undertakings. It is a matter for discussion in this chapter and in Chapter 6 whether abuse of a dominant position in Article 102 can be determined based on evidence of either intent or effects.

There are overlaps in the application of Articles 101 and 102. For example, an agreement prohibited under Article 101 may also create a collectively dominant position, abuse of which falls to be addressed under Article 102.

\textit{Concerted practice and dominant position}
The terms used in the provisions include three, in particular, that have attracted particular attention over time: “concerted practices” in Article 101, “[one or] more undertakings” in Article 102 and “dominant position” in Article 102.

Article 101(1) contrasts “concerted practices” with agreements and with decisions of collectives and groups such as associations, and yet, like agreements and association decisions, concerted practices are prohibited if they have the requisite object or effect of preventing, restricting or distorting competition. On the other hand, “concerted practices” are also to be contrasted with individual decisions and practices of independent commercial undertakings in the market. The term “concerted practices” suggests circumstances in which suppliers to the market are operating in concert, or in harmony or in a connected and related way, but which may not have formed into mature or explicit agreements.

The meaning of “dominance” was initially defined by the European Court of Justice in United Brands,\textsuperscript{385} in which the Court held that “the dominant position referred to in this Article [102] relates to a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.”\textsuperscript{386} This is a version of the definition of market power\textsuperscript{387} and is the meaning that has been adopted and applied in later cases.\textsuperscript{388}

Article 102 envisages that “one or more undertakings” may be dominant in a market. In relation to multi-firm dominance, the question arises as to whether and under what conditions it makes sense for it to be referred to as collective dominance, given the basic meaning of “dominance” adopted in and applied since United Brands. The implication of United Brands is that in an effectively competitive market all competitors, from the largest to the smallest, need to have regard to the behaviour of their competitors, customers and consumers, all of which behaviour provides a potential restraint on the ability of those competitors to act completely independently of other market participants in setting prices and determining production. The issue is whether two or more competitors can act individually in a market to set prices and/or production levels

\textsuperscript{385} United Brands Company and United Brands Continentaal BV v Commission of the European Communities [1978] ECR 207

\textsuperscript{386} ibid. [65]

\textsuperscript{387} See discussion of market power in Chapter 2

independently of their competitors, customers and consumers, without conscious or intentional coordination. The answer suggested by the case law and by common sense is that this is not possible, but that two or more competitors might be *collectively* dominant if the structure of the market is such that they can act without being unduly concerned about the responses of *yet other*, third party competitors, as well as customers and consumers. European case law, as will be shown in this chapter, proceeds on the basis that, for two or more competitors to be able to act in this way, there must be an agreement or understanding or some other linkage between them that enables them to proceed without being unduly constrained further. The relevant competitors would not be acting independently, but cooperatively, under this scenario. In this respect, the linkage performs the same connecting function as “concerted practice” in Article 101.389

**Concertation, cooperation and coordination**

In the *Dyestuffs Case*390 the Court held that the purpose of the reference to “concerted practice” in Article 85 (as Article 101 then was) was to “bring within the prohibition of the article a form of coordination between undertakings which, without having reached the stage where an agreement properly so-called has been concluded, knowingly substitutes practical cooperation between them for the risks of competition.”391

Although this statement might assist in providing different synonyms for “concerted practice”, such as “coordination” and “cooperation”, it does not take the matter very far in terms of what amounts to the collective and intentional adoption of a common purpose by the various undertakings. How do we know, for example, whether behaviour is concerted or coordinated, in contrast to behaviour that is the independent expression of the self-interest of each of the undertakings, after considering all aspects of the market situation, including the likely behaviour of various competitors? Put another way, the case does not distinguish the conscious parallel behaviour that may occur in an oligopolistic market from the notion of “concerted practice”. Nor does it say that the former is an example of the latter. The Court did, however, retain the notion that the substitution of practical cooperation for competition must be done knowingly. This appears to be more than the level of awareness of the market place and the way it works that might characterise most market participants. It appears to refer to the

389 (Case 48/69) *ICI v Commission* [1972] ECR 619, [64] (*Dyestuffs*)
390 (Case 48/69) *ICI v Commission* [1972] ECR 619 (*Dyestuffs*)
391 [bid, [64]
knowing adoption of a cooperative approach, and not just of parallel conduct (such as, for example, following the price levels set by another competitor).

An attempt was made in United Sugar\textsuperscript{392} to clarify the way in which the concepts of coordination and cooperation might illuminate the term “concerted practices” in Article 85. The Court noted that undertakings have a right to adapt themselves intelligently to the existing and anticipated conduct of their competitors.\textsuperscript{393} This point has been repeated in later cases, suggesting that any individual undertaking may respond to the circumstances of the market at an individual level, including consciously adapting its behaviour to parallel that of other competitors in the market, without any suggestion that it is acting in concert or engaging in a concerted practice with those other competitors.

However the adverse implications of this approach for robust competition have been of concern in later cases, where there have been attempts to reduce its application. Clearly parallel behaviour resulting in reduced price competition is unlikely to result in the price levels that would result from more robust competition. The Court in United Sugar stated that:

\begin{quote}
[the] criteria of coordination and cooperation laid down by the case-law of the court, which in no way require the working out of an actual plan, must be understood in the light of the concept inherent in the provisions of the Treaty relating to competition that each economic operator must determine independently the policy which he intends to adopt on the common market including the choice of the persons and undertakings to which he makes offers or sells.\textsuperscript{394}
\end{quote}

This statement is consistent with competitors independently choosing to follow the price leadership of others in the market. Presumably this is acceptable, so long as the potential of market forces to extend or sustain such an arrangement are not diminished by the actions of the parties or the structure of the market itself.\textsuperscript{395}

\textsuperscript{392} (Joined Cases 40-48, 50, 54 to 56, 111, 113 & 114/73), Cooperatieve vereniging “Suiker Unie” UA and Others v Commission, [1975] ECR 1663
\textsuperscript{393} Ibid [174]
\textsuperscript{394} Ibid [173]
\textsuperscript{395} The notion that parallelism that is potentially unstable and short-lived will be explored further in later chapters, particularly Chapter 8
It is the requirement of independence of action that the Court identifies in the Article that operates to “strictly preclude any direct or indirect contact between such operators, the object or effect whereof is either to influence the conduct on the market of an actual or potential competitor or to disclose to such a competitor the course of conduct which they themselves have decided to adopt or contemplate adopting on the market.”

The problem with the formulation in United Sugar is that the Court has not given any guidance on how the independence of action is to be tested. There is always the possibility of independent action by a number of competitors that may have similar approaches to achieving a goal that they are each individually seeking - such as acquiring individually a greater share of the market - bearing in mind that commercial organisations in the same industry are responding to the same external environment which they may well perceive in a similar way. The Court has not clarified how this situation, which one imagines is typical of competitive rivalry in any market, is to be examined and assessed. The facts of United Sugar allowed an easy answer in the particular situation that was then before the court because the parties were in contact with each other and operated as part of a corporate group. However, it is not clear what might have resulted in the absence of contacts within a corporate group structure with overlapping boards, and where the contact and communication was through public statements or other intermediation (such as via publication in news media), which would be the situation in many cases of alleged oligopolistic coordination. These circumstances were addressed in later cases.

In Hoffmann La-Roche the Court was dealing with alleged abuses of dominance in the pharmaceutical sector. The dominance in that case was of a single undertaking. Nevertheless in examining the issues of abuse of dominance under Article 86 the Court did comment on the conclusions that can be drawn from parallel conduct in which competitors are adopting similar commercial strategies including prices:

A dominant position must be distinguished from parallel courses of conduct which are peculiar to oligopolies in that in an oligopoly the courses of conduct interact, while in the case of an undertaking occupying a dominant position the

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396 (Case 48/69) ICI v Commission [1972] ECR 619, [174] (Dyestuffs)
397 Ibid [175]
398 Particularly in Woodpulp II, see above Footnote 405 and following discussion
399 Hoffmann La-Roche & Co. AG v Commission, [1979] ECR 461
A position in a market is not the same as behaviour in a market, even though the two concepts might be related in terms of the potential that the former affords for the latter. In *Hoffmann La-Roche* the Court did not make this basic distinction but, instead, referred to a dominant position as one where conduct is unilateral compared to the parallel conduct “peculiar to oligopolies”. *Hoffmann La-Roche* therefore does not appear to accept collective dominance, except possibly in cases where the undertakings are corporately related, such as in a group. But the conclusion is *obiter* because collective dominance was not an issue before the court.

**Collective dominance**

In *Italian Flat Glass* the Court of First Instance considered collective dominance for the first time. In that case a number of Italian glass manufacturers, through various agreements and licences, were alleged to have operated in a concerted manner and to have established a position of collective dominance in the relevant glass markets. The Court developed a view of collective dominance based on the notion of a single undertaking, stating that:

> The concept of undertaking in Article 86 denotes, as it does in Article 85, an economic entity. Two or more undertakings may hold a dominant position within the meaning of Article 86 of the Treaty where two or more independent economic entities are, on a specific market, united by such economic links and, by virtue of that fact, together hold a dominant position vis-à-vis the other operators in the market. This could be the case, for example, where two or more independent undertakings jointly have, through agreements or licences, a technological lead affording to them the power to behave to an appreciable extent independently of their competitors, of their customers and ultimately of their consumers.

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400 Ibid [39]
403 *Italian Flat Glass*, [4]
This formulation builds on the definition of dominance in *United Brands*. The “economic links” referred to in the case would seem to portend the much broader nature of economic links that are discussed in later cases in this Chapter, and may be taken as a first reference to the economic circumstances in common that become apparent in certain markets where the actions of undertakings are transparent to each other. However, the example given in *Italian Flat Glass* is of a technological agreement which would be a very specific structural arrangement organised by the parties rather than arising from the economic circumstances of the market itself. In this sense *Italian Flat Glass* goes little further than in *Hoffmann La-Roche*, by requiring structural links between the undertakings. The undertakings need not be linked through ownership, as they were in *United Sugar*, but that would seem to be the norm that the Court in *Italian Flat Glass* had in contemplation when it noted:

> The Commission has not demonstrated either the existence of institutional links between the undertakings analogous to those that exist between parent and subsidiary nor the loss of their individual autonomy nor the absence of competition among them.\(^{404}\)

The Court did, however, leave the way open for demonstrations of collective dominance that do not involve institutional links. In *Italian Flat Glass* the Court held that the Commission had simply failed to make its case.

**Parallel conduct**

In *Woodpulp II*\(^{405}\) the Court examined a Commission decision in which there seemed to be strong evidence of concertation. The concerted practice in question was that 40 wood pulp producers and three of their trade associations participated in a system of quarterly price announcements. The question was whether this system of announcements was an elaborate means of signalling prices between producers in advance of each quarter in order to enable them to better align their prices. The Commission argued to this effect, and, in addition, that the announcements had the effect of making the market artificially transparent. The Court rejected these arguments. It considered that the announcements were addressed to users and did not

\(^{404}\) Ibid [344]

\(^{405}\) Cases C-89/85, *A Ahlstrom Oy v Commission* [1993] ECR I 1307 (*Woodpulp II*)
lessen each producer’s uncertainty as to the future actions that may be taken by its competitors. 406

On the specific matter of concertation and coordination, the Court stated:

A concerted practice refers to a form of coordination between undertakings which, without having been taken to the stage where an agreement properly so-called has been concluded, knowingly substitutes for the risks of competition practical cooperation between them. The criteria of coordination and cooperation which enabled that term to be defined must be understood in the light of the concept inherent in the provisions of the Treaty relating to competition that each economic operator must determine independently the policy which he intends to adopt on the common market. 407

This formulation significantly adds to the confusion and seems to do no more than substitute synonyms for the words in the Article itself without adding explanatory value. It substantially repeats the position in Dyestuffs on this point. 408 A “concerted practice” becomes a “form of coordination” which “has been concluded”. For the form of coordination to have been concluded there would seem to be a need for prior action on the part of the undertakings involved so that the current behaviour is merely acting in accordance with the arrangements that have been concluded. The reference to “knowingly” substituting practical cooperation for the risks of competition is also problematic. This could be no more than a series of parallel conscious assessments by individual undertakings that their individual best interest is served by in acting in a certain, possibly risk-averse, way. There need be nothing collective or joint about these decisions at all.

Perhaps the most generous interpretation of the judgment in Woodpulp II is to regard it as deciding that the reference to “concerted practices” in Article 85 must be given some meaning and that the term is to be contrasted with the model of competition embodied in the treaty – that of independent economic entities determining their own approach to market and competing on those terms. In addition, the facts of Woodpulp II suggest that there is a heavy burden in showing that action is coordinated in this way. Part of the burden is showing that there are no alternative credible explanations that are

406 Ibid, [59-85]
407 Ibid, [63]
408 (Case 48/69) ICI v Commission [1972] ECR 619, [64] (Dyestuffs)
consistent with independent decision-making by the undertakings involved. On this latter point the Court stated that “... parallel conduct cannot be regarded as furnishing proof of concertation unless concertation constitutes the only plausible explanation for such conduct.”

The Court went on to restate the basic proposition about the rights of undertakings to operate in a commercially sensible manner taking account of the circumstances they find themselves in, including the possible behaviour and responses of market competitors:

> It is necessary to bear in mind that, although Article 85 of the Treaty prohibits any form of collusion which distorts competition, it does not deprive economic operators of the right to adapt themselves intelligently to the existing and anticipated conduct of their competitors...

The Court’s decision on the facts is far from compelling, notwithstanding its decision that “in this case, concertation is not the only plausible explanation for the parallel conduct.”

According to the Court, the system of price announcements “may be regarded as constituting a rational response to the fact that the pulp market constituted a long-term market and to the need felt by both buyers and sellers to limit commercial risks.”

Clearly this may well be the reason for the behaviour and for the establishment, growth and continuation of the announcement system, but being rational is not inconsistent with collusion or concertation. In fact, collusion or concertation may be a very rational response to the risks of competition in a market. Attempting to obtain market objectives with least risk would seem to be archetypal rational behaviour of firms in any market. In addition, limitation of commercial risks is precisely what various forms of agreement, including unlawful collusion and concertation are designed to do. So the first part of the Court’s plausible alternative explanation does not appear to be an acceptable alternative at all.

It is possible that the Court may have been using the term, ‘rational’, in a slightly different sense, of ‘understandable’ or even conflated ‘rational’ with ‘justifiable’ in the

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410 Ibid
411 Ibid [126]
412 Ibid
broadest sense. If so, the Court would have been asserting that behaviour which is sensible and understandable, perhaps because it is what any firm might do in the circumstances, is therefore justifiable. Such a proposition would create a broad defence, unacceptable from a policy perspective, in a wide range of competition law cases. Alternatively, the Court may have intended that, in the circumstances of the case, a plausible explanation for the conduct other than it being anti-competitive.

The Court continued:

Further, the similarity in the dates of price announcements may be regarded as a direct result of the high degree of market transparency, which does not have to be described as artificial.\textsuperscript{413}

In other words, the transparency existed prior to the system and timing of price announcements. The Court is stating that the market had a high degree of transparency in any case, and this was not materially enhanced by the timing of price announcements. However, even if this were the case, the pulp producers would appear to have had established a system that preserved and institutionalised the transparency. This aspect is surely ‘artificial’ and cannot be attributed to the operations of the market.

The final consideration that found favour with the Court was that “the parallelism of prices and the price trends may be satisfactorily explained by the oligopolistic tendencies of the market and by the specific circumstances prevailing in certain periods.”\textsuperscript{414} On this view it was the oligopolistic nature of the market that supported the persistence of the system of price announcements, and, in so doing, contributed to price parallelism. The Court is, accordingly, allowing participants to take advantage of and build on the oligopolistic features of the markets in which they operate.

\textit{Woodpulp II} is a case where the facts seem to strongly indicate a concerted set of actions by suppliers and their associations, and yet it failed to convince the Court. Some of the factors which seemed to have influenced the Court in its decision were the long-term contractual relationships between large customers and pulp producers and the power of customers within those arrangements to determine volumes and to negotiate further individual reductions in price, below the prices announced quarterly in

\textsuperscript{413} Ibid
\textsuperscript{414} Ibid
advance.\textsuperscript{415} There was, therefore, considerable negotiating leverage remaining with buyers and substantial price competition in practice after the monthly price announcements.

It can be concluded that \textit{Woodpulp II} has set a high bar for the attribution of concertation to the parallel practices of suppliers in any market. In the process, however, the Court left uncertain the criteria to be applied in determining whether an alternative explanation to the typical conscious parallel behaviour that may be found in any oligopolistic market is plausible. The case goes further and requires that concertation must be the only plausible explanation for the parallel behaviour. \textsuperscript{416}

**Collective dominance – evidentiary issues**

In \textit{France v Commission}\textsuperscript{417}, the European Court of Justice annulled a Commission decision conditionally approving the merger of two German potash producers. In the process the Court shed some light on the circumstances in which a collectively dominant position might either come into existence or be strengthened and therefore be subject to the prohibitions in Article 86. The Community market share of the merging companies was assessed at 60%, the market share of a large French producer (SCPA) was assessed at 20%\textsuperscript{418}, and the market share of the remaining suppliers was considered to be too fragmented to effectively compete with the two producers, post-merger.\textsuperscript{419}

The Court considered that the Commission’s decision to approve the merger was based on weak evidence. The evidence in question related to each of the three criteria on which the Commission sought to establish that a collective dominant position would arise between the merged entities and SCPA following the merger. The three criteria were “the degree of concentration on the market which would follow from the merger, the structural factors relating to the nature of the market and the characteristics of the product, and the structural links between the undertakings concerned.”\textsuperscript{420}

\textsuperscript{415} Ibid [13]
\textsuperscript{416} Ibid [3], “Parallel conduct cannot be regarded as furnishing proof of concertation unless concertation constitutes the only plausible explanation for such conduct.”
\textsuperscript{417} \textit{France v Commission} [1998] 4 C.M.L.R 829 (Joined Cases c-68/94 & C-30/95)
\textsuperscript{418} Ibid, 949 [236]
\textsuperscript{419} Ibid, 947 [219]
\textsuperscript{420} Ibid, 937 [180]
The Court found that the market share cannot be a conclusive determinant of a collective dominant position. \(^{421}\) In addition to market share other factors would need to be considered, such as the strength and characteristics of the other competitors already in the market, and, if the market was characterised by low barriers to entry, other potential entrants would need to be considered. Combined market share may not be irrelevant but it could never have the compelling consequences proposed by the Commission when it argued that “it is settled case law that a market share of about 60 per cent points to the existence of a collective dominant position...” \(^ {422}\)

The court favoured evidence that a third supplier with over 10% of the market share with a high level of overcapacity was a structural factor not adequately considered by the Commission which would likely be a counterweight working against the formation and maintenance of a collective dominant position. \(^ {423}\)

On the important criterion of structural links, the Court held that the evidence did not support the Commission’s conclusions. \(^ {424}\) The alleged links related to other products (kieserite, rather than potash) or did not operate in the manner assumed (normal market conditions applied to sales between the parties). \(^ {425}\) The suggestion from the Court was therefore that the structural links had to be proximate to the market in question and to be something other than standard arm’s length transactions in the market in order to be used as evidence of likely cooperation in the relevant market.

In *France v Commission* the Court was concerned more with the effect of the evidence and its cogency in the circumstances of the case rather than with the concept of concertation or the criteria that might enable a conclusion that a collective dominant position would arise from changes in market structure after a merger. The Court in this case progressed no further in determining the criteria that are both necessary and sufficient for distinguishing between conscious parallelism and collective or joint behaviour.

\(^ {421}\) Ibid, 947-8 [226]
\(^ {422}\) Ibid, 940 [194]
\(^ {423}\) Ibid, 951 [247-8]
\(^ {424}\) Ibid, 949 [239]
\(^ {425}\) Ibid, 948 [230]
Collective dominance: Linkages and connecting factors

The concept of “linkages” between competitors in an oligopolistic market being sufficient to characterise behaviour that might otherwise be considered to be conscious parallelism as concerted behaviour was further explored in *Compagnie Maritime Belge v Commission*.\(^{426}\) In this case the European Court of Justice affirmed the Commission’s finding of collective dominance, and abuse of a collective dominant position, in the case of a shipping conference, Cewal, of which Compagnie Maritime Belge was a member, based on collective attempts to exclude competition from the conference shipping routes by price cuts and loyalty bonuses.

The Court interpreted the phrase “one or more undertakings” in Article 86 of the Treaty as implying “that a dominant position may be held by two or more economic entities legally independent of each other, provided that from an economic point of view they present themselves or act together on a particular market as a collective entity.”\(^{427}\) This statement further clarified the remarks in earlier cases that the undertakings needed to be related in some way.\(^{428}\) The notion of two entities “presenting themselves” or “acting together” as a single entity for the purposes of operating in a market is amenable to at least two interpretations. Firstly, it might suggest that there have been coordinated decisions by both entities to operate “collectively” or as a single entity in a market. In that case the situation may be best described as the entities coming to an understanding in some way, or otherwise aligning their behaviour to pursue a common policy. If that can be supported by the evidence, then there would seem to be no issue with treating the behaviour in the market as collective or coordinated. But the notion of two entities presenting themselves might be equally consistent with separate and independent decisions to act in a manner that is merely parallel, but seen by third parties as being a single entity. “Collective entity”, a phrase not used in Article 86, has been imported in an attempt to explain the operation of collective dominance, but it is ambiguous as a concept in terms of its connotations and offers no bright line between collusion on the one hand and conscious parallel behaviour on the other. In cases involving shipping conferences or associations there might be little doubt about the

\(^{426}\) *Compagnie Maritime Belge Transports SA v Commission of the European Communities* [2000] 4 C.M.L.R. 1076

\(^{427}\) Ibid, 1154 [36]

\(^{428}\) For example in *Hoffmann La-Roche & Co. AG v Commission*, [1979] ECR 46, [39]
parties presenting themselves as a single entity, but this does not extend to the situation of separate legally independent entities adopting parallel strategies in a market.

In *Compagnie Maritime Belge* the Court held that:

> [t]he existence of an agreement or of other links in law is not indispensable to a finding of a collective dominant position; such a finding may be based on other connecting factors and would depend on an economic assessment and, in particular, on an assessment of the structure of the market in question.

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In fact the collective entity in the case was the shipping conference, Cewal, formed by agreement between the shipping operator members. However, as a formulation of what might be taken into consideration when determining whether there is a collective entity for the application of collective dominance, the case opens up a range of issues, but offers little guidance on how they might be evaluated or settled. The idea of “other connecting factors” is at large, although the Court suggests that they will be factors to do with the structure of the market. In itself, this formulation scarcely helps, because, amongst other things, it does not address the issue whether connecting factors need to be seen as connectors by the parties concerned and be capable of being shown to have influenced their behaviour, or whether they are held to operate in an objective sense and are considered to have some likelihood or probability of influencing behaviour and of encouraging coordination and collective action in the market. Put another way, do the members have to intend the economic relationships that exist between them to be linkages around which they might align or coordinate their behaviour, or is it sufficient that they may be considered with some plausibility to operate as focal arrangements for alignment viewed from the perspective of an objective observer?

*Compagnie Maritime Belge* was concerned with actual behaviour and whether that behaviour was an abuse of a collective dominant position of the kind prohibited by Article 86. But because the existence of a shipping conference agreement through Cewal was the uncontested basis for determining a collective entity and because of Cewal’s overwhelming market share, in excess of 90%430, the Court readily found that there was a collective dominant position. In merger and regulation cases the situation differs from competition cases such as this, because in those cases the assessment is prospective and not the characterisation of past behaviour.

429 *Compagnie Maritime Belge*, 1156 [45]
430 Ibid, 1166 [119]
Collective dominance and partial competition

Even allowing that the concept of separate undertakings presenting as a collective entity might have a sufficiently fixed and certain meaning to be useful in explaining the circumstances under which those entities could hold a position of collective dominance, there is an issue about the extent of the competition that may occur between such entities and whether such competition is consistent with a conclusion of collective dominance.

For example, there may be rivalry between competitors on some matters, such as advertising, but not in relation to price or in relation to dealings with new entrants. Is the existence of some competition consistent with the notion of a collective entity?

In the TACA Case, which concerned a liner conference, the Commission considered collective dominance under Article 86 in “the market for sea transport services to which the TACA relates ... containerised liner shipping services between northern Europe and the United States using the sea routes between ports in northern Europe and ports in the United States and Canada.” In this case the Commission took the view that a very high collective market share of members of the liner conference, at approximately 70%, created a presumption that the undertakings were collectively dominant. The collective entity was assumed to be established through the TACA conference agreement and the TACA Secretariat. The Commission took into account factors and links other than market share to conclude that the members of TACA “enjoyed a collective dominant position within the meaning of Article 86 of the Treaty.” The other factors included the TACA tariff to which the TACA parties are bound, the extensive enforcement provisions in the TACA agreement, the substantial elimination of price competition between TACA parties, and the role of the TACA secretariat and the publication of annual business plans. The Commission determined that the TACA

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431 Case No IV/35.134, Transatlantic Conference Agreement, OJ 9.4.1999 L95/1 (TACA)
432 Ibid, L95/16 [84]
433 Ibid, L95/92 [533]; “In the most important segment of the market, [the TACA parties] had a share of approximately 70% in each year. This market share must also be seen in the light of the growing demand in the market. Such a large market share gives rise to a strong presumption of a dominant position.”
434 Ibid, L95/91 [529]
435 Ibid, L95/94 [549]
436 Ibid, L95/91[526]
437 Ibid, [527]
438 Ibid, [528]
439 Ibid: “The TACA parties have also adopted measures which are intended to present the TACA parties as a single united body and so diminish pressure for price reductions from customers. Of particular importance in this respect has been the role of the TACA secretariat and the publication of annual business plans.”
parties were dominant in the defined shipping market because of factors such as the ability to impose substantial surcharges on routes under their control, the creation and maintenance of barriers to switching to non-TACA carriers, and price leadership.

The Court of First Instance upheld the appellants’ claims in relation to abuse of a dominant position, resulting in partial annulment of the Commission’s decision. The Court held that “both by its nature and in the light of its objectives, a liner conference …may be described as a collective entity which presents itself as such on the market vis-à-vis both users and competitors.” On the issue of whether a collective dominant position existed between the TACA parties, the Court described the required linkage arrangements as follows:

In order to conclude that such a dominant position exists, the undertaking concerned must, according to the case law, be sufficiently linked between themselves to adopt the same line of action on the market. Possibly the Court is indicating that the linkage has to be sufficient to support cooperative action. Put another way, the Court seems to be saying that if the relationship or linkage is tenuous or weak, it would be unlikely to give rise to or support coordinated action in the market. Because the TACA is a liner conference there is little argument that the members presented as a collective entity, or that, based on the evidence in the case, that they had substantial linkages between them. However, in other competition law cases where there is not a membership body such as the liner conference in TACA, or the pulp makers associations in Woodpulp II, it is reasonable to ask whether the idea of a sufficient linkage to support a common purpose or “same line of action” may not be too glib. In these ex post competition law cases, the behavioural result is available for assessment. It would require a more thorough analysis than an assessment of the linkages between the firms to determine whether the “same line of action” was so tenuous.

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440 Ibid, L95/93 [537]  
441 Switching part of a shipper’s requirements to smaller carriers “would reduce their minimum volume commitment under a TACA service contract and lead to a smaller discount.” Ibid [540]  
442 “The independent lines set their rates by reference to the TACA’s tariff and are, accordingly, price takers. Such a position enables the TACA and its members to act independently of its competitors and its customers.” Ibid [542]  
443 Atlantic Container Line and Others v Commission of the European Communities, [2005] 4 C.M.L.R. 20 [1648]  
444 Ibid [601]  
445 Ibid [595]  
446 Ibid [598]
action” was the result of concertation and tacit collusion on the one hand, or the result of the parallelism that certain market structures might encourage in any case.

The Court upheld the Commission’s conclusion in relation to the collective dominant position of TACA and its members. While it noted that there were factors other than market share that the Commission had identified, it is unfortunate that the Court gave prominence to the collective market share of the TACA firms. The Court stated:

> It has been held that although the existence of a dominant position may be the outcome of a number of factors which, considered separately, would not necessarily be determinative, in the absence of exceptional circumstances, extremely large market shares are in themselves evidence of the existence of a dominant position.\(^{447}\)

The Court endorsed that position.\(^{448}\) As a general principle this is incorrect when applied to collective dominant positions, although it may apply where associations, such as shipping conferences, are concerned. The Court appears to have assumed that the aggregated market shares of a collective entity operate in the same way as the market share of a single entity for the purpose of dominance. But this is not so. The relative market shares of the various members of a collective entity are important because they may be so different as to make the adoption of a common purpose unlikely in many market situations. This is not an “exceptional circumstance”. This important consideration is likely to be overlooked when only the aggregate share is considered. Also, as indicated in later decisions\(^ {449} \), the way in which market share is distributed, outside the collective entity, may determine whether or not there is potential for effective competition from such sources and for disruption of any cooperative or collusive arrangement.

**Gencor: Economic links and parallel behaviour**

The Court of First Instance also emphasised the importance of the aggregate market share of the competitors considered to have collective dominance in *Gencor Ltd v* 

\(^{447}\) Ibid [907]

\(^{448}\) Ibid [920]: “In this case, however, the holding of a market share in the order of 60 per cent over a period of three years, corresponding to the first three years of the operation of the TACA agreement, cannot be regarded as prima facie insufficient to give rise to a presumption of a dominant position.”

\(^{449}\) Notably in *Airtours plc v Commission of the European Communities* [2002] ECR II-2585, discussed later. The approach endorsed in *Atlantic Container Line and Others v Commission of the European Communities*, is explicitly continued in *Gencor Ltd v Commission* [1999] 4 C.M.L.R. 971, 1053 [205].
Commission, a case where a merger was held to create market conditions suitable to the emergence of collective dominance of the merged entities together with the other major participant in the world platinum market.

The Court clearly differentiated the significance of market share levels in cases of collective dominance from cases of single dominance. The Court stated:

It is true that, in the context of an oligopoly, the fact that the parties to the oligopoly hold large market shares does not necessarily have the same significance, compared to the analysis of an individual dominant position, with regard to the opportunities for those parties, as a group, to act to a considerable extent independently of their competitors, their customers and, ultimately, of consumers. Nevertheless, particularly in the case of a duopoly, a large market share is, in the absence of evidence to the contrary, likewise a strong indication of the existence of a collective dominant position.

If the parties to the concertation do not each have substantial and similar market shares, and if they collectively do not have a substantial market share, then the other participants in the market may have sufficient power to challenge any behaviour that flows from their market position. So a large collective market share relative to the other participants in the market is necessary for collective dominance, but is it sufficient? The answer is that it is not. Unlike the approach of the Court in the TACA Case, in Gencor the Court only talks of it being a strong indication of collective dominance. Other factors, such as the capabilities of other market participants need to be considered, as well as other factors that may support or be contrary to a position of collective dominance. But the key inquiry must be about whether the parties in question are likely to develop as competitors to each other or as cooperating, colluding participants.

The Court proceeded to consider other structural factors, such as price transparency and similarity of cost structures, that might be relevant to concluding that a collective dominant position might well arise after the proposed re-arrangement and acquisitions. The Court concluded:

Consequently, given the similarity in the market shares, shares of world reserves and cost structures of the undertakings at issue, the Commission was entitled to

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450 [1999] 4 C.M.L.R. 971
451 Ibid, 1053-4 [206]
452 Ibid, 1054 [206]
conclude that, following the concentration, the interests of [the other major supplier and the merged entity] with regard to the development of the market would have coincided to a higher degree and this alignment of interests would have increased the likelihood of anti-competitive parallel behaviour, for example, restrictions of output.\footnote{Ibid, 1057 [222]}

The Court has fudged the issue here, by referring to \textit{anti-competitive} parallel behaviour.\footnote{Ibid} The Court did not explain how anti-competitive and other parallel behaviour that might arise from the same circumstances might be distinguished based only on an assessment of market structure. The bright line, if it exists, that separates parallel behaviour which is anti-competitive and unlawful, from parallel behaviour which is neither, remains elusive and is certainly not described by the Court.

The Court then reviewed in detail the Commission’s analysis of the market characteristics and whether they were consistent with collective dominance, such as high transparency,\footnote{Ibid, 1058 [229]: “… the commission was fully entitled to find that there was a high transparency not only in terms of prices, but also in relation to production, sales, reserves and new investment.”} \footnote{Ibid, 1059-60 [237]: In relation to average annual forecast growth of 3\%, “… the Commission was entitled to conclude that new competitors would not be encouraged to enter that market, or existing competitors to adopt an aggressive strategy to capture that additional demand”} low forecast growth in demand,\footnote{Ibid, 1063 [261-2]} alternative sources of platinum supply,\footnote{Ibid, 1064-6} structural links,\footnote{Ibid, 1068 [295]} and past oligopolistic tendencies.\footnote{(Case T-68/89) \textit{Societa Italiano Vetro v Commission}, [1992] ECR II-1403 (\textit{Flat Glass})} In relation to links between the parties, the Court noted that the judgment in \textit{Italian Flat Glass}\footnote{Gencor, 1064-5 [273-5]} did not require structural links between entities for a finding of collective dominance.\footnote{Ibid, [274]} Indeed, any form of “being united by economic links” may suffice.\footnote{Ibid, [274]}

The Court went further and held that:

\begin{quote}
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
\end{quote}

\footnote{Ibid, 1057 [222]}

\footnote{Ibid}

\footnote{Ibid, 1058 [229]: “… the commission was fully entitled to find that there was a high transparency not only in terms of prices, but also in relation to production, sales, reserves and new investment.”}

\footnote{Ibid, 1059-60 [237]: In relation to average annual forecast growth of 3\%, “… the Commission was entitled to conclude that new competitors would not be encouraged to enter that market, or existing competitors to adopt an aggressive strategy to capture that additional demand”}

\footnote{Ibid, 1063 [261-2]}

\footnote{Ibid, 1064-6}

\footnote{Ibid, 1068 [295]}


\footnote{Gencor, 1064-5 [273-5]}

\footnote{Ibid, [274]}
behaviour and are therefore strongly encouraged to align their conduct on the market, in particular in such a way as to maximize 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.\textsuperscript{463}

If the relationship of interdependence between parties “in a market with the appropriate characteristics” might be a sufficient relationship to conclude in favour of collective dominance, a great deal hangs on the words “appropriate characteristics”. This is especially so given that courts had in the past been at pains to differentiate conscious parallel conduct, without more, from collusion.\textsuperscript{464} A key turning point was therefore reached in \textit{Gencor}, even though only in obiter dicta, namely, that oligopolistic interdependence alone might be sufficient in appropriate cases to establish the linkage necessary to connect the behaviour or potential behaviour of the parties and to conclude that they share a positon of collective dominance in the market.

What might be “appropriate characteristics” in an oligopolistic market that enables conscious parallelism based on anticipation and awareness of the likely behaviour of other participants to be a basis for collective dominance? The Court answered this in terms of “market structures of an oligopolistic kind where each undertaking may become aware of common interests, and, in particular, cause prices to increase without having to enter into an agreement or resort to a concerted practice.”\textsuperscript{465} As noted above the oligopoly would need to be tight, with very few competitors, and have a high degree of transparency. Also the market would need to be one of substantial product homogeneity.\textsuperscript{466} The Court sees the linkage in \textit{Gencor} as the production of platinum, a homogenous commodity product which could serve as a ready focus around which the parties could align their price behaviour. The outputs of the parties were very close substitutes produced via effectively the same processes at similar costs. The Court noted that the “Commission was entitled to conclude, relying on [factors such as] the

\textsuperscript{463} Ibid, 1065 [276]
\textsuperscript{465} \textit{Gencor}, 1065 [277]
\textsuperscript{466} Ibid, 1065 [276]
similarity of the costs of Amplats and Implats/LPD, that the proposed transaction would create a collective dominant position.\textsuperscript{467}

However, the proposed concentration in \textit{Gencor} was not disallowed on the basis of a theory of tight oligopoly. There were other economic links\textsuperscript{468} as well that the Commission was held to be entitled to take into account.\textsuperscript{469}

The Court in \textit{Gencor} has done little to develop an approach based on oligopoly. “Market structures of an oligopolistic kind” would seem to mean no more than an oligopoly where there is considerable transparency. The reference to each undertaking becoming “aware of common interests” also creates confusion rather than explains.

Market participants in an oligopoly who become aware of common interests might discern, through the course of repeated competitive dealings, that they have some interests in common with their competitors. For example, they might discover that they have similar responses to pricing initiatives, or that they have similar preferences in refusing to deal with new entrants, and so on. This level of knowledge and understanding of how the market operates might well be no more than the intelligent appreciation that market participants gain over time. The participants concerned would be hard-pressed not to take this market knowledge into account in the way they approach the market and in their commercial dealings.

Alternatively, becoming aware of common interests could refer to the gradual realisation that longer-term more profitable outcomes might be achieved at lower risk through adopting a common policy in relation to action in the market. The individual pursuit of self-interests would appear to be fully consistent with recognising common interests. This is to be distinguished from the collective pursuit of common policies or common interests. This is a very important distinction. Behaviour might, in some circumstances, be the same whether it serves individual interests as when it serves common interests. For example, where an established undertaking refuses to provide wholesale services to new entrants to avoid competition between the new entrant and the established undertaking’s retail arm, this might be because the established

\textsuperscript{467} Ibid, 1065 [279]

\textsuperscript{468} \textit{Gencor}, [272], referring to Commission Decision 97/26/EC (Case No IV/M.619 — Gencor/Lonrho), in which the other economic links mentioned were (1) that the members of the oligopoly met each other in all platinum markets as well as in other markets, such as gold markets [155]; (2) structural (ownership) links existed between many of the members, at various levels [156]; and AAC bought 6% of the shares of Lonrho with an entitled to buy a further 18%, all in addition to other related ownership stakes in Lonrho [157].

\textsuperscript{469} Ibid, 1065 [280]
undertaking considers that the refusal to deal will be the best commercial outcome that it can achieve for itself. In other words, the established undertaking will have assessed the benefits from keeping more of the retail market for itself as better than the returns from a new wholesale customer. That same behaviour may serve to advance the similar objective shared by more than one established undertaking. If the behaviour itself does not distinguish behaviour where the purpose is shared to the point of being collective, what does? The Court in Gencor does not make this distinction clear and offers no guidance on how market situations might be analysed to be one way or the other in practice.

Gencor is a merger case. This means that the Court did not have to examine past behaviour or to determine whether there has been an abuse of a dominant position. The Court needed only to consider whether the market structure that resulted from the proposed merger would be more likely to result in collective dominance than the market situation that would have resulted without the proposed merger. The Court therefore had to compare two probabilistic evaluations. This involves a lower threshold than determining whether, in considering past behaviour and the actual circumstances of a market, there is a position of collective dominance which has actually been abused. This is the case notwithstanding that in both circumstances the evidentiary standard is based on the balance of probabilities and on which outcome – collective dominance or not – is more likely than not. It is something of a paradox that courts considering predictions about future outcomes on a probabilistic basis, may meet the common evidentiary standard with less factual evidence and more conjecture than when the courts consider past situations which are fully knowable. The latter was the situation in Gencor, where the Court upheld the Commission decision on this point.470

Conclusions

The Commission and courts of the European Union recognised early that participants in markets where the structures were conducive might have both the incentive and the opportunity to cooperate rather than compete. Since the inception of the European Union explicit collusion to determine market outcomes has been prohibited in the TFEU. Explicit collusion has been typically characterised by agreements or understandings in

470 Ibid, 1065 [279]: “The Commission was entitled to conclude, relying on the envisaged alteration in the structure of the market and on the similarity of the costs of... [the merged entities on the one hand, and the other key global platinum producer] ... that the proposed transaction would create a collective dominant position and lead in actual fact to a duopoly constituted by those two undertakings.”
relation to price, capacity, customer allocation or some other aspect of market
manipulation where the agreements were arrived at through communication of one
kind or another. The Commission and the courts recognised that participants in markets
with appropriate structures might also have the incentive and the capacity to align their
behaviour, over time, to achieve non-competitive outcomes of a similar kind to those
that could result from explicit anti-competitive collusion.

Article 102 of the TFEU (and its predecessor articles) provided the touchstone for
developing a comprehensive approach to collective dominance with emphasis on
determining the meaning to assign to the phrase, “... or more undertakings”.

In this Chapter I have outlined the development of collective dominance in Europe in the
light of the case law interpreting and applying Articles 101 and 102. The Commission
and the courts have proceeded to build on models of collusion and of linkages between
market participants with which they were familiar, including the model provided by
explicit collusion or cartelisation and the notion of intent.

In *Hoffmann La Roche*, the Court required that there exist structural links between the
participants for a finding of collective dominance.\(^{471}\) In *Woodpulp II* the Court required
that the participants should “knowingly” align their behaviour and was concerned to
leave substantial room for conscious parallelism to operate to exonerate tacit collusion
in situations where alternative plausible explanations were available.\(^{472}\) *Woodpulp II*
therefore retained a central importance for intentionality in tacit collusion, of the kind
that might be reflected in explicit collusion between members of a cartel.\(^{473}\) However, in
the absence of communications intent is difficult to prove.

In *France v Commission*, the need for structural links between the participants was
reconfirmed.\(^{474}\) In *Compagnie Maritime Belge*\(^{475}\), however, there was a shift away from
the linkage arrangements that had previously been thought to be sufficient for collective
dominance. The important factor, as determined by this case, was that the collectively
dominant firms should be legally independent but present themselves to the market as

\(^{471}\) *Hoffmann La-Roche & Co. AG v Commission*, [1979] ECR 461, at [39]

\(^{472}\) *Cases C-89/85, A Ahlstrom Oy v Commission* [1993] ECR I 1307, at [63] (*Woodpulp II*)

\(^{473}\) Ibid, [71]

\(^{474}\) *France v Commission* [1998] 4 C.M.L.R 829, 937 [180] (Joined Cases c-68/94 & C-30/95)

\(^{475}\) *Compagnie Maritime Belge Transports SA v Commission of the European Communities* [2000] 4 C.M.L.R. 1076
a single, albeit collective, entity.\textsuperscript{476} Since the case involved shipping conferences the collective aspect associated with being conference members was clearly apparent.

In \textit{Gencor}\textsuperscript{477} the analysis was taken further. The links in question need not be structural, but could be economic.\textsuperscript{478} In \textit{Gencor} the Court discussed the notion that such economic links might arise from the interdependence between firms to be found in oligopolistic markets;\textsuperscript{479} but, in the end, the Court did not propose to move away from the analytical framework built on intent and towards a more objective, effects-based approach to the overall problem of oligopoly regulation.

So, with the \textit{Gencor} case, the framework built on the foundations of explicit collusion had been extended in a number of directions to cater for the requirements of collective dominance. The linkages between firms acting in concert did not need to be corporate linkages within a group, or structural in any way. It was sufficient that these linkages were economic and, in the circumstances of the case, taking into account the structure of the market, they may arise from the interdependence of the firms in an oligopolistic market. But there had to be some linkage around which a common policy to the market might be focussed and around which behaviour might be potentially aligned. There was still room, it would seem, for the concept of conscious parallel behaviour – behaviour that reflected the self-serving behaviour of individual firms - to operate and to be applied in appropriate circumstances without the threat of competition law or regulatory intervention. The notion of intent remained part of the approach at that point in the development of the law. Intent in the sense of recognition of the cooperative embrace of common purposes in the market could not be proven by direct evidence of behaviour or from communications between the parties (otherwise explicit collusion would be at issue). Intent would instead be evidenced through the implications of market structure and the absence of alternative plausible explanations.

\begin{flushleft}
\textsuperscript{476} Ibid, 1154 [36]
\textsuperscript{477} \textit{Gencor Ltd v Commission} [1999] 4 C.M.L.R. 971, 1053
\textsuperscript{478} Ibid, 1064-5 [273-5]
\textsuperscript{479} Ibid, 1065 [276]
\end{flushleft}
Chapter 6: Collective dominance in Europe – Airtours and after

Introduction

In this chapter I shall set out the approaches that the Commission and the European Court of Justice took to collective dominance and tacit collusion in the critically important Airtours case.\textsuperscript{480} In addition I shall observe the manner in which the Airtours decision has been received and its treatment in subsequent cases. The important outcome of this chapter will be to show how, through the case law, the stage has been set for European jurisprudence on the treatment of oligopoly competition to move beyond the limitations imposed by the need to find evidence of actual, presumed, constructive or implied intent on the part of the key participants in such markets.

Airtours at the Commission level

The Commission blocked a merger of Airtours and First Choice, both tour operators, on the ground that such a merger would create a collective dominant position in the United Kingdom market for short-haul packaged holidays and would be incompatible with the Common Market.\textsuperscript{481}

The Commission distinguished between the short-haul and long-haul package holiday markets on the bases of the time to fly to the destinations from the United Kingdom. Destinations accessible by a flight of three hours or less were in the former market, and other destinations were part of the latter market.\textsuperscript{482} The markets were considered by the Commission to involve limited substitutability, reinforced by significant price differentials.

The Commission considered that the proposed merger would remove competition between the three large players remaining in the United Kingdom market after the merger – Airtours/First Choice, Thompson and Thomas Cook – because structural features of the market and the way in which the market would operate would be changed as a result. The Commission noted that the combined market share of the

\textsuperscript{480} Commission decision 2000/276/EC, 22 September 1999 in Case IV/M, Airtours/First Choice; Airtours plc v Commission of the European Communities [2002] 5 C.M.L.R. 7 (CFI)

\textsuperscript{481} Commission decision 2000/276/EC, 22 September 1999 in Case IV/M, Airtours/First Choice

\textsuperscript{482} Ibid, paragraphs (16) to (28)
large operators would be around 80%, and concluded that the large operators would no longer have an incentive to compete with each other.

The Commission concluded that the three remaining large tour operators would have every interest in adopting parallel conduct in reducing capacity below the level needed to meet planned demand. The existing four large tour operators were vertically integrated each with its own charter airline. According to the Commission, they were of a size at which they had exhausted most of the scale economies that were available in the foreign short-term package holiday market. By contrast, the remaining firms in the market were smaller, “fringe”, non-integrated, independent operators and agents, with limited capacity and ability to compete effectively and did not have their own or associated charter airlines. The Commission noted that capacity was planned and booked up to a year before departure date by tour operators, and that capacity would be hard to offload in a demand downturn. At the same time, fringe suppliers would be constrained in both absolute terms and relative to the major operators in increasing capacity to meet increased demand. This was because the major operators had priority access to charter airline capacity, especially the part that was self-supplied, and because of the increased cost of using scheduled airline services for package tour seats.

The Commission used the terms “collective dominance” and “oligopolistic dominance” interchangeably. It undertook an examination of the market characteristics and structure before and after the proposed merger and concluded that the likelihood of effective competition would be further reduced if the merger proceeded. The proposed merger would, in the Commission’s view, “create a sustainable collective dominant position in the British tour operating market comprising Airtours/First Choice, Thompson and Thomas Cook”. In coming to this conclusion the Commission examined a range of characteristics identified as conducive to collective dominance in earlier cases and in the literature, including product homogeneity, low demand growth, low price sensitivity,

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483 Ibid, paragraphs (72) and (75). The market shares, according to the Commission’s data, were Thompson, 27%; Airtours, 21%; Thomas Cook, 20%; and First Choice, 11%.
484 Ibid, paragraph (169)
485 Ibid, paragraph (170)
486 Ibid, paragraph (41)
487 Ibid, paragraphs (99-100)
488 Ibid, paragraph (75)
489 Ibid, paragraph (77)
490 Ibid, paragraph (63)
491 Ibid, paragraph (83)
492 Ibid, footnote (45) to paragraph (58)
493 Ibid, paragraph (158)
similarity of cost structures, transparency, interdependency and commercial links, barriers to entry, and buyer power.  

The Commission’s decision focused particularly on transparency, and on the ability of the major tour operators to monitor market developments, detect divergence from the focal point on which coordination takes place (capacity) and on the ability of the tour operators to retaliate in the event of any divergence. The Commission determined that the transparency of the market was high both during the planning period for a season, and also during the subsequent selling period.

The Commission considered that transparency during the planning period for a season was substantially aided by the way in which planning was conducted – or at least the way in which the Commission understood planning to be conducted. The Commission asserted that planning from one season to the next was incremental, and that “simply due to past experience, tour operators know already before the planning of a season to a large extent what the offerings of the four integrated suppliers will be for the new season”. Capacity decisions would be difficult to keep secret in the market because airline purchases are published and preferred hotels in destination cities would soon advise others in the industry if they had been booked out or had insufficient accommodation to meet further demand.

Later, during the selling season, information on availability and price becomes widely known as sales material is made available to travel agents. Most travel agents used a system called Viewdata which displays availability and price information in real time. The Commission considered that there was no need for the major operators to collude on the thousands of prices that were in the Viewdata system, because “market share is determined by the amount of capacity offered”. Because of the emphasis on capacity as the focal consideration, the Commission did “not consider a very high degree of transparency of prices to be necessary for the creation of collective dominance in the present case”. The main suppliers “are able to obtain precise, up-to-date and

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494 Ibid, paragraphs (87 – 127)  
495 Ibid, paragraph (102)  
496 Ibid, paragraph (104)  
497 Ibid, paragraph (105)  
498 Ibid, paragraph (107)  
499 Ibid, paragraph (108)  
500 Ibid, paragraph (109)
accurate estimates of their and their main competitors’ market shares ... on a weekly basis at the tour operating level”. 501

On the crucial question of the relationship between oligopolistic interdependency and collective dominance, the Commission held that pre-merger, there was a “certain degree” of mutual dependency between the operators in the market, sufficient to create strong economic links. 502 The proposed merger will “make these economic links even stronger and, therefore, increase the mutual dependency of the large operators” according to the Commission. 503 The Commission notes that the number of competitive relationships will be reduced from six to three after the merger, and that competition in the market can be positively gauged by the number of such relationships. 504

**Airtours: the Court of First Instance**

Airtours appealed the Commission’s decision to the Court of First Instance where it was overturned. 505

The Court generally applied the principles in Gencor. 506 Most of the case was taken up by a comprehensive re-examination of the data on which the Commission relied, resulting in the Court arriving at a completely different set of conclusions on most issues.

The Court outlined three conditions which it described as necessary for a finding of collective dominance. These conditions, which were not in dispute between the parties, were, firstly, a high level of transparency in the market; secondly, an incentive not to depart from the common policy; and thirdly, that the foreseeable reactions of competitors and consumers would not jeopardise the results expected from the common policy. 507

**The first condition in Airtours: a high level of transparency**

In relation to the first condition, the Court required that -

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501 Ibid, paragraph (110)
502 Ibid, paragraph (142)
503 Ibid, paragraph (143)
504 Ibid
506 Gencor Ltd v Commission [1999] 4 C.M.L.R. 971
507 Ibid
...it is not enough for each member of the dominant oligopoly to be aware that interdependent market conduct is profitable for all of them but each member must also have a means of knowing whether the other operators are adopting the same strategy and whether they are maintaining it. There must, therefore, be sufficient market transparency for all members of the dominant oligopoly to be aware, sufficiently precisely and quickly, of the way in which the other members’ market conduct is evolving....

This description of the way in which transparency must work to satisfy the threshold requirement for collective dominance, and the appropriate level of transparency to enable such working, clearly leaves it open for the members of an oligopoly to be aware of the interdependency that results from such a market structure without that awareness being automatically elevated to a necessary or sufficient condition for collective dominance. The awareness might be at a level to support conscious parallelism, but below the threshold for collective dominance. The level of transparency required must be more than the awareness of each operator that the behaviour of one can lead to responses with repercussions throughout the market. Importantly, it is not enough to meet the transparency requirements for individual participants in oligopolistic markets to be aware of the interdependence of market conduct.

The Court set a standard for transparency that was more than the possibility of occasional observations and feedback about the behaviour of other competitors in the market. The transparency must enable a precise assessment of the way in which the market conduct of others is developing. Given that the Commission has used market share based on the deployment of capacity as the focal consideration in this case, the evolution of market share and its deviation from expectation may take some time, and not be immediately apparent. If the level of transparency is insufficient to enable monitoring with precision and appropriate immediacy it will fail to satisfy the first condition set out by the Court.

In the description of the first condition the Court has assumed that there is a common policy and that the conformity with or deviation from that common policy by other competitors needs to be monitored. The transparency level does not create the incentives for a common policy, only the possibility that its implementation might be effectively monitored. I will return to this aspect of the case later in this chapter. At the

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Ibid
least, there is a distinct risk that the language of the judgment presupposes the
existence of such a policy in the course of discussing the requirement of market
transparency.\textsuperscript{509}

Transparency is necessary for more than monitoring compliance with a common policy;
it may well be important to the process of enabling competitors to understand the
elements that might form a common policy in the first place. For example, retail prices
in a market might be well advertised, and therefore the range of prices and way they
vary with other characteristics (quality, volume, etc) might be very transparent to
competitors in the market. This transparency therefore could be of critical assistance in
establishing price as the focal dimension of a common policy on the market.
Alternatively, the transparency of retail prices might do no more than confirm for the
market participants how price levels have, for the time being, allowed a matching of
supply and demand in the market. The point is that although transparency might assist
in the formation or maintenance of a common policy, it need not have that effect and
the conclusion that a common policy has been formed and maintained in the specific
market needs to be established separately, based on other evidence. Opportunity
should not be confused with incentive. The Court appears to have intended this very
point when it stated: “It is appropriate to observe in limine that the fact that a market is
sufficiently transparent to enable each member of the oligopoly to be aware of the
conduct of the others is conducive to the creation of a collective dominant position.”\textsuperscript{510}
But it is not at all clear, and the Court could be suggesting more than opportunity.

The judges and commentators regard transparency, rightly, as the \textit{sine qua non} for
creating and maintaining tacit collusion.\textsuperscript{511} But it is insufficient to transform a common
understanding of the market into a common policy on the market.

\textbf{The second condition in Airtours: sustainability of tacit coordination over time
and responding to deviation}

The second condition is that “the situation of tacit co-ordination must be sustainable
over time, that is to say, there must be an incentive not to depart from common policy

\textsuperscript{509} Ibid: “first, each member of the dominant oligopoly must have the ability to know how the other
members are behaving in order to monitor whether or not they are adopting the common policy.”
\textsuperscript{510} Ibid, 355, paragraph (156)
\textsuperscript{511} Filippelli, M, ‘Collective dominance in the Italian mobile telecommunications market’ (2010) 32(2)
\textit{European Competition Law Review} 81, 120
on the market. ... The notion of retaliation in respect of conduct deviating from the common policy is thus inherent in this condition.”

The Court in Airtours recognised that to talk in terms of incentives for maintaining the common policy is to recognise that there is more involved than the possibility of punishment for deviation and non-compliance. Incentive for compliance with a common policy involves more than avoiding the punishment inherent in retaliation. The Court stated that -

...there must be adequate deterrents to ensure that there is a long-term incentive in not departing from the common policy, which means that each member of the dominant oligopoly must be aware that highly competitive action on its part designed to increase its market share would provoke identical action by the others, so that it would derive no benefit from its initiative...

The Court considered that there were a number of characteristics that go to the adequacy of the deterrents in any situation. In the circumstances of the present case the Court observed that the functioning of the market “made it difficult for retaliatory measures to be implanted quickly and effectively enough for them to act as adequate deterrents.” For example, the Court noted that it would have been difficult to detect any deviation during the planning stage, and consequently would have been difficult to make clear the link between the much-later punishment and an earlier deviation. The deterrent or incentive must be seen by the parties in this light at the time in order for the deterrent or incentive to influence competitor behaviour.

In addition, sanctions applied for deviating or non-compliant behaviour during the sales stage were also considered by the Court as likely to be ineffective. It was established that it was difficult to add capacity late in the sales stage, and after the conclusion of planning, and that the operator doing so would only have access to non-preferred, inconvenient flights and poorer-quality accommodation. This would be an inadequate response to the actions of a deviating operator. The actions of a deviating operator

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512 Airtours plc v Commission of the European Communities [2002] 5 C.M.L.R. 7 at (62)
513 Ibid, the Court considers that Gencor v EC Commission was to that effect and cites paragraph (276) in support. However that paragraph makes no mention of deterrents at all.
514 Ibid, 365 at paragraph (197)
515 Ibid, paragraphs (196) and (198)
516 Ibid, paragraph (204)
would most likely be planned and have the full benefit of planning such as access to preferred flights, better quality accommodation and full and timely sales support.

The Court in *Airtours* made it clear that in analysing the nature of the supposed retaliatory arrangement it is insufficient to *imagine* or *assume* that resumption of competition might be feasible in response to deviation or, if it occurred, might be effective. Rather it is necessary to show in some detail how the deterrents or incentives might work and how they would be adequate to the task of ensuring ongoing adherence to the common policy.

The Court indicated that there are various ways in which the efficacy of retaliation might be diminished. Firstly, if there is inadequate transparency the remaining members of a tacitly colluding oligopoly would be constrained in monitoring and detecting deviations and therefore would be constrained in knowing when retaliation might be appropriate or needed.  

Secondly, delayed retaliation or retaliation insufficiently proximate in time to the deviation, will be of lesser or no effect. Lastly, retaliation that “would entail economic loss for its perpetrators” would also be ineffective, or even unlikely to occur.

**The third condition in *Airtours*: jeopardy from the foreseeable reaction of current and future competitors**

The third condition stated by the Court is a requirement that “to prove the existence of a collective dominant position to the requisite legal standard, the Commission must also establish that the foreseeable reaction of current and future competitors, as well as of consumers, would not jeopardise the results expected from the policy.”

Again, this condition is a different matter entirely to the issue whether a common policy has been adopted. If there is a common policy and some understanding or other arrangements between the leading participants in the market, or some of them, then it is certainly appropriate for the regulatory agency and the Court to inquire whether that arrangement will survive the pressures that will be placed upon it in the marketplace. If smaller competitors can use their existing capacity to readily acquire market share and if consumers, or enough of them, have alternatives for supply of services, then neither the

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517 Ibid, paragraph (62), the first condition
518 Ibid, paragraphs (203) and (204)
519 Ibid, paragraph (206)
520 Ibid, paragraph (62)
regulatory agency nor the Court need be concerned that a viable and continuing constraint will be imposed on the market by the competitors alleged to be collectively dominant.

In the circumstances of the case the Court found ample evidence of past behaviour which indicated that the many smaller tour operators in the market, even without vertical integration into airline operations or into the travel agency business, had proved to be very adept at taking advantage of opportunities left in the market by the larger tour operators.\footnote{Ibid, paragraphs (208) – (276). “It is unlikely that any hotel beds becoming available following a decision by the large tour operators to restrict capacity will not be immediately booked by other operators.” (267)} The Court concluded that the Commission underestimated the ability of the smaller operators to respond should the large operators deliberately reduce their capacity, and therefore the ability of the smaller operators to jeopardise the outcomes sought by the colluding operators.\footnote{Ibid. The Commission argued that in order to disrupt co-ordinated capacity restrictions by larger operators, small operators would have to increase their capacity significantly, “which would not be possible given their existing size”. Small operators “encounter substantial barriers to expansion”. (209) The Commission assumed that smaller operators needed to reach a minimum size and thereby to have the scale to be able to be competitive and to increase their capacity quickly and as required. (214) In fact the evidence showed many examples of smaller operators being able to do just that. (218) —(228)}

**Oligopolistic interdependence**

The Commission focused in its analysis on the vertical integration of the four major firms, and of those firms not only being tour operators but having their own charter aircraft fleet and their own network of travel agencies. The Commission concluded that this was a major difference between the large tour operators and the smaller tour operators in the market, and was one reason why the smaller operators might be incapable of responding effectively to the behaviour of the large operators in reducing capacity or increasing price.\footnote{Commission decision 2000/276/EC, 22 September 1999 in Case IV/M, Airtours/First Choice, (71): “There are also a number of commercial links between the integrated companies, deriving in part from their vertical integration. The downstream links, via the use of each other’s travel agency chains, have already been mentioned; these are important, since sales through third party agencies account in general for a high proportion (though not, as a rule, a majority) of the integrated operators’ holiday sales.”}

But the Commission did not fully analyse the impact of vertical integration and the reasons why firms might seek to vertically integrate. Usually this has to do with securing supply, via upstream integration, or securing retail presence, via downstream integration. The Court identified this issue, and the likelihood that vertical integration is conducive to less interdependence rather than more:
In the absence of any evidence to the contrary, there must be a presumption, given the logic of the way the market operates, that vertical integration makes the large tour operators more independent from each other and this reduces their interdependence.  

“Common Policy”

The use of the term “common policy” in Airtours is essentially the same as that in Kali & Salz and Gencor, both of which are cited in this regard by the Court. The term “common policy” suggests that the adherents have each adopted the policy, whatever form it may take, as individual undertakings each of whom has recognised that its longer-term commercial interests will be best served by the policy, rather than by actions that aim to maximise individual profitability in the shorter-term. Calling it a “common policy” stresses the collective adoption of the policy more than calling it, for example, “a similar approach, arrived at individually, to competing in the market,” and yet both could be equally accurate as descriptions of the approach that the larger participants might take in an oligopolistic market. The first description suggests coordination or cooperation; the second is neutral on that point.

The Court talks of the Commission being obliged by previous case law to examine whether the merged entity and the two other large tour operators “because of factors giving rise to a connection 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.” The Court therefore accepts the notion that a linkage or connection is necessary to convert what might otherwise have been a similarity of policy into a common policy. However the citation refers only to the parties being able to adopt a common policy, not that they will adopt or have adopted a common policy in such cases.

The Court then goes on to describe how the common policy is formed:

... in view of the actual characteristics of the relevant market and of the alteration in its structure that the [merger] transaction would entail, the latter would make each member of the dominant oligopoly, as it becomes aware of

524 Airtours plc v Commission of the European Communities [2002] 5 C.M.L.R. 7 at (284)
525 Kali-Salz/ Mdk/ Treuhand, Official Journal L.186, 21/07/1994, 38 at (60) — (61)
526 Gencor Ltd v Commission [1999] 4 C.M.L.R. 971 at (16)
527 Airtours plc v Commission of the European Communities [2002] 5 C.M.L.R. 7 at (59)
common interests, consider it possible, economically rational, and hence preferable, to adopt on a lasting basis a common policy on the market with the aim of selling at above competitive prices, without having to enter into an agreement or resort to a concerted practice within the meaning of Article 81 EC.

However, even if this is the process of common policy formation, the Court sheds no light on how the economically rational and perfectly understandable might become an actual adoption of a common policy in the instant case, or in any case. In the instant case, the Court concluded that the evidence was below the standard required to show that there was collective dominance. In the general situation, not related to this case, it is unreasonable to expect evidence of awareness and intent, when the collusion is alleged to be of the tacit variety. But the consequence of that approach is that we are left with nothing more than an invitation to assume an intention to adopt a common policy will arise from the structural characteristics of the market. This line of thinking leads to the conclusion that if a market has structural characteristics, including various linkages between the main operators, such that the awareness of common interests will increase the possibility of adoption of a common policy, then it is acceptable to assume that there will probably be adoption of a common policy in the future. This approach may be appropriate in the cases of merger control and ex-ante regulatory intervention, where the regulator is concerned with the extent of the risk that a common policy will be adopted and the risk that abuse of the significant market power will result. Actual intent is therefore not required in order to assume that a common policy will emerge, only that the circumstances are conducive to the adoption of a common policy.

Overd recognised this issue when he wrote that the Commission must explain how market “… characteristics would facilitate tacit coordination. Although the Court’s framework does not solve all the difficulties associated with predicting the likelihood of future coordination, it does at least clarify the meaning of collective dominance as a concept and it specifies the relevant avenues of investigation.”

Howe and Fernandes consider that the Court came closer to doing this in Airtours than in previous cases:

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528 Ibid, 333-4, at paragraph (61)
529 Overd, A, 'After the Airtours appeal' (2002) 23(8) E.C.L.R. 375, 376
The Court does not require that the Commission set out a detailed game theoretic model of how the oligopolists would come to adopt a common policy (though game theory may provide useful insights). But it is not enough that oligopolists might find it mutually profitable to act in a coordinated rather than individual way. The Commission must show how, in the particular circumstances of the market, the common policy (in Airtours/First Choice on planned capacity) will come about and be adhered to.\footnote{Howe, M and Fernandes, P, One’s a Monopoly, Two’s Collectively Dominant, Three’s Alright? (2002) www.Europe-economics.com/download/eeairtours.pdf (accessed 22 Feb 2015) 3}

Even a more detailed description of how specific factors associated with the market structure might facilitate tacit collusion will not amount to direct evidence of intent. In this area of the law, as in many others, intent might be assumed from the objective evidence of the market structure and other aspects of the case. Another approach would be to say that if there is a material risk of collective dominance the courts and regulators are warranted in proceeding on the basis that the risk, in the absence of regulatory intervention, will become manifest. The Court’s approach has the effect of eroding lawful conscious parallelism and of leaving its residual scope and application uncertain.

**Market structure factors conducive to collective dominance**

The Court reviewed the evidence of various factors relating to market structure that have been previously considered to be associated with collective dominant market positions. In relation to these factors, as well as the three conditions already referred to, the Court reviewed the evidence and arrived at conclusions that differed from those of the Commission. These factors included:

- any tendency towards collective dominance prior to the proposed merger;\footnote{Airtours plc v Commission of the European Communities [2002] 5 C.M.L.R. 7 at [84-91 and 120]: the Commission tried to argue both ways on this point.}
- volatility of historical market shares;\footnote{Ibid, 348 [120]}
- low demand growth;\footnote{Ibid, 351 [133]}
- the necessary degree of market transparency;\footnote{Ibid, 348 [120]}

- the adequacy of deterrents for deviations from a common policy;\textsuperscript{535}

- the likely reaction of smaller tour operators, potential competitors and consumers to destabilise the alleged dominant oligopoly;\textsuperscript{536} and

- commercial links between the major tour operators.\textsuperscript{537}

Each of these factors was assumed to be associated with a greater tendency for the market to sustain collective dominance. However some are ambiguous. No single factor or group of factors is determinative of collective dominance.

For example, any tendency towards collective dominance prior to the proposed merger would have had a number of effects. Such a tendency would change the position that the Commission would need to argue. Instead of showing that the proposed merger would create a collectively dominant position, the Commission would be required to show that the proposed merger would have the effect of strengthening a collectively dominant position that was already in place. This might have been a less challenging task than having to show in what way the proposed merger created for three large operators a collectively dominant position that was assumed not to be in place with four large operators pre-merger.

The problem for the Commission in this case was that it did not express a conclusion on the matter either way, a point noted by the Court.\textsuperscript{538} The Court however was influenced by the fact that the Commission “did not deny that the market was competitive” before the proposed merger, and therefore is stuck with the consequences in the assessment of evidence.\textsuperscript{539}

The Commission argued that there was no volatility in the shares that large operators have in the market. Movement in the relative share levels would, presumably, be

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{534} Ibid, 361 [160]
\item \textsuperscript{535} Ibid, 366 [207] Because of the delay between capacity increase planning and its appearance in the market, the Court concluded that “the deterrents identified by the Commission do not appear to be capable of coming into play.” 365 [199]
\item \textsuperscript{536} Ibid, conclusion at 382 [277] following a very detailed review of the evidence by the Court
\item \textsuperscript{537} Ibid, 385-6 [289-93] The sale of wholesale capacity between the major vertically integrated tour operators can be explained in standard commercial terms as profit maximising without construing these arrangements as structural links going to a collective dominant position
\item \textsuperscript{538} Ibid, 340-1, paragraphs (84) and (89)
\item \textsuperscript{539} Ibid, paragraph (89)
\item \textsuperscript{540} Ibid, paragraph (92)
\end{itemize}
\end{footnotesize}
indicative of competition, and stability of historic market shares would be taken to be evidence of collusion or cooperation. In this case the Commission argued that such an analysis should not include changes in market share as a result of acquisitions, an argument which the Court rejected because of the potential competitive consequences of acquisitions and the attempts by the firms concerned to take full advantage of economies of scale. With acquisitions considered, there was significant volatility in market shares in the relevant markets.

On the issue of low demand growth, a factor that is usually taken to be conducive to collective dominance, the Court examined the information that was before the Commission when it formed its decision on this point, and concluded that the Commission had misinterpreted the information available to it, and that, in fact, demand growth had been considerable over the previous decade. The Court regarded low demand growth as a structural factor which could encourage collective dominance. The connection between low demand growth and collective dominance is not accepted by all commentators and the available evidence suggests that the relationship is more complex than a simple negative correlation between demand growth and collusion.

On each of the points listed above the Court reviewed the data and found serious errors in the Commission’s analysis. As noted above, the Court examined a series of factors that were considered to be more indicative of collective dominance than not, but found the evidence adduced by the Commission in each instance to be below the required legal standard. Importantly, the Court re-examined the bases on which the Commission claimed that the major operators have a high level of transparency in observing the actions of each other, and found that the circumstances would not have afforded such transparency, especially during the critical planning stage for each holiday season.

541 The absence of market share movement might also result from robust competition as each initiative aimed at increasing share is met by an effective response. Presumably such thrust and counter thrust could be demonstrated on the record.

542 Airtours plc v Commission of the European Communities [2002] 5 C.M.L.R. 7 at paragraph [111]

543 Ibid, paragraph (113)

544 Ibid, paragraph (117)

545 Airtours plc v Commission of the European Communities [2002] 5 C.M.L.R. 7 at paragraphs (133) and (147)

546 Symeonidis, G, “In which industries is collusion more likely? Evidence from the UK”, (2003) 51 Journal of Industrial Economics, 45. This study suggests a more complex relationship. There is some evidence that collusion is more likely under moderate market growth than in a market with declining or flat demand. However the evidence also suggests that collusion is less likely under substantial growth conditions than under moderate growth. Symeonidis is dealing with explicit collusion through cartels.

547 Ibid, paragraphs (167) – (174)
Although the Court in *Airtours* provided a compelling illustration of how to evaluate economic evidence, with devastating effect for the Commission’s approach, the central issue of collective dominance in the absence of agreement or communication between the allegedly dominant undertakings was not materially progressed beyond that in earlier cases. It is true, however, that the Court required careful analysis to examine how a common policy might be formed with emphasis on the details that make a case compelling, but this is a process response and a reaction against blithe statements and ready assumptions rather than the development of an authoritative and replicable approach. The analysis in *Airtours* is sufficient to conclude that anything more authoritative or more determinative of specific outcomes (such as a *per se* rule) is not likely to emerge. As a merger case, *Airtours* is dealing with ex-ante intervention based on the probabilities for future behaviour inherent in the structure of the market.

**The Sony Case: Muddying the waters further**

Beyond the evaluation of economic evidence, the importance of the criteria for collective dominance and the linkage between collective dominance and tacit collusion in *Airtours* was spelled out by the European Court of Justice in the *Sony* case.\(^548\) In that case the Commission had cleared the proposed merger between Bertelsmann and Sony, both participants in the global music distribution market. In the Court of First Instance, Impala, an association of independent music publishers was successful in having the Commission’s approval of the merger overturned. The original parties to the merger appealed to the European Court of Justice.

On the issues associated with collective dominance, the Court of First Instance reaffirmed the three conditions defined in *Airtours*, which it said “were inferred from a theoretical analysis of the concept of a collective dominant position”\(^549\) and noted that they “are indeed also necessary”.\(^550\) The Court of First Instance then sought to extend the ways in which collective dominance might be established based on the conditions in *Airtours*:

> ... they may, however, in appropriate circumstances, be established indirectly on the basis of what may be a very mixed series of indicia and items of evidence


\(^{550}\) Ibid
relating to the signs, manifestations and phenomena inherent in the presence of a collective dominant position.\textsuperscript{551}

The Court of First Instance was concerned that there might not be direct evidence of the level of market transparency contemplated in the first condition in \textit{Airtours}:

Thus, in particular, close alignment of prices over a long period, especially if they are above a competitive level, together with other factors typical of a collective dominant position, might, in the absence of an alternative reasonable explanation, suffice to demonstrate the existence of a collective dominant position, even where there is no firm direct evidence of strong market transparency, as such transparency may be presumed in such circumstances.\textsuperscript{552}

The European Court of Justice in its decision on these matters repeated the approach adopted in \textit{Compagnie Maritime Belge} that “the existence of an agreement or of other links in law between the undertakings concerned is not essential to a finding of a collective dominant position. Such a finding may be based on other connecting factors and would depend on an economic assessment and, in particular, on an assessment of the structure of the market in question.”\textsuperscript{553}

The European Court of Justice noted that there may exist “correlative factors” which enable undertakings to adopt a common policy on the market ... in order to profit from a situation of collective economic strength...,”\textsuperscript{554} and explained that:

... correlative factors include, in particular, the relationship of interdependence existing between the parties to a tight oligopoly within which, on 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 on the market in such a way as to maximise their joint profits by increasing prices, reducing output, the choice or quality of goods and services, diminishing innovation or otherwise influencing parameters of

\textsuperscript{551} Ibid
\textsuperscript{552} Ibid, [252]
\textsuperscript{554} Ibid, [120]
competition. In such a context an operator is aware that highly competitive action on its part would provoke a reaction on the part of others, so that it would derive no benefit from its initiative.\textsuperscript{555}

Unlike the Court of First Instance in this case, the European Court of Justice reinstated transparency as a requirement. Transparency was one of the characteristics considered to be appropriate for a finding of collective dominance along with high levels of market concentration and product homogeneity. The European Court of Justice reaffirmed this aspect of the \textit{Airtours} decision but, in the process, the emphasis on a very high level of transparency which occurs in \textit{Airtours} was reduced.

The question that needs to be asked here is how the individual awareness and anticipation in the circumstances described differ from the individual awareness and anticipation in circumstances where there is no tacit collusion. There is no bright line to distinguish between the situations or to determine when the normal operations and consequences of an oligopolistic market become tacit collusion.

The three conditions in \textit{Airtours} provide a degree of structure around this issue. However, the approach of the European Court in \textit{Sony} weakens that structure by allowing for indirect evidence based on correlative factors to establish a conclusion of adequate transparency to facilitate and maintain tacit coordination. The approach in \textit{Sony} is an argument that certain factors are typically highly correlated (hence correlative) with the existence of a collective dominant position, and, if they exist, that collective dominant position must also exist. And because there is a position of collective dominance there must have been adequate transparency to sustain it. The argument is tenuous at best, based on the assertion of a typical connection between the factors and collective dominance, and then supposition about the existence of conditions that are necessary to sustain it. The argument might have been less tenuous and more compelling if the correlative factors were always, or nearly always, co-existent with collective dominance, suggesting direct or indirect causation. However, a “typical connection” leaves some room for exceptions. Despite that, the European Court of Justice supported this approach in principle:

\begin{quote}
...the investigation of a pre-existing collective dominant position based on a series of elements normally considered to be indicative of the presence or the
\end{quote}

\textsuperscript{555} Ibid, [121]
likelihood of tacit coordination between competitors cannot therefore be considered to be objectionable in itself.\textsuperscript{556}

However the Court continued that “it is essential that such an investigation be carried out with care and, above all, that it should adopt an approach based on the analysis of such plausible coordination strategies that may exist in the circumstances.”\textsuperscript{557} It was on this basis that the appeal was upheld, because the Court of First Instance “did not carry out its analysis of those parts [of the contested decision that were based on transparency] by having regard to a postulated monitoring mechanism forming part of a plausible theory of tacit coordination.”\textsuperscript{558}

In other words, the indirect approach to establishing that there was a level of transparency sufficient to lead to some form of tacit coordination might be accepted, based on a high degree of interdependence in a tight oligopoly, but that does not fully satisfy the first condition in \textit{Airtours}. The indirect approach did not excuse the Court of First Instance from examining the circumstances of the market to determine whether the transparency was of a level sufficient to enable monitoring of the behaviour of other competitors for evidence of departure from the common policy. The Court of First Instance did not examine how the monitoring mechanism might actually work as part of an overall plausible scheme of tacit coordination.

\textbf{The current position}

The \textit{Airtours} and \textit{Sony} cases appear to have settled the approach of European law to the notion of collective dominance for the purposes of the Merger Rules and Article 102 of the Treaty. The current position may be stated as follows:

Firstly, despite the difference between the concept of collective dominance and the concept of tacit collusion (or tacit coordination) – the first relating to market structure and the second to market behaviour - it is now well established that the concepts have been conflated in practice, at least in the sense that the existence of market characteristics conducive to collective dominance raise, at the same time, an equivalent risk of tacit collusion. The conflation of the two concepts may be considered to be a kind of shorthand for the idea that collective dominance and tacit collusion, in the view

\textsuperscript{556} Ibid, [129]  
\textsuperscript{557} Ibid  
\textsuperscript{558} Ibid, [130]
of the European courts, are always present or absent together, and therefore, for all practical purposes, may be considered to be the same. The danger with this approach, in *ex post* competition cases, is that evidence supportive of tacit cooperation may be separately evaluated and be considered to be sufficient evidence of abuse of a collective dominant position. The result would be that the evidence for the existence of a collective dominant position would also be considered as evidence of an abuse of that position.

Secondly, the notion of non-collusive parallel conduct, including in oligopolistic markets, appears to be intact although the scope of the concept and any presumption in favour of such a conclusion is now unclear. The view that this is the conclusion to be reached if there is no structural or behavioural evidence of cooperation – as in the *Woodpulp II* case\(^{559}\) - appears still to be intact but, after the line of cases explored above, the scope of what might be accepted as contrary evidence of cooperation, has arguably increased.

Thirdly, the three conditions set out in *Airtours* have become established as necessary conditions for collective dominance. In particular, the *Sony* case at the ECJ level has confirmed that position.\(^{560}\)

Fourthly, the first condition in *Airtours* relates to the need for transparency of a level sufficient not only to establish cooperation but also sufficient to enable behaviour to be monitored to determine if there are departures from the common policy. Arguably the need for a careful evaluation of the circumstances in relation to the ability to effectively monitor competitor behaviour, a need emphasised in *Sony*,\(^{561}\) may mean that the standard of proof has increased. Nevertheless, in some market circumstances, a relatively low level of transparency may now suffice to meet the requirements of the first condition in *Airtours*. In effect, *Sony* has changed the specification that should apply to the level of transparency required for a conclusion on market monitoring. The standard in *Sony* is the level of transparency required in the circumstances of the market concerned, rather than transparency of a pre-determined higher order. The standard has changed and in some circumstances the actual level of transparency may well be lower than the suggested in *Airtours*.

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\(^{560}\) On this point Golding has noted: “It seems, however, clear that the *Airtours* test for collective dominance stands...” Golding, J, ‘The Impala case: a quiet conclusion but a lasting legacy’, (2010) *E.C.L.R.* 31(7), 261, 266

Fifthly, indirect evidence of transparency may be accepted, in principle at least, if the market exhibits correlative factors that are typically associated with the existence of collective dominance. Such factors may include, for example, “market concentration, transparency and product homogeneity.” There remains a clear need for a careful evaluation of the market to determine that adequate monitoring of competitor behaviour to detect deviations from the common policy may be implemented by the relevant competitors. It is to be noted that the example of transparency in the cited text adds a degree of circularity to this proposition. The alternative test for collective dominance articulated, but not applied, by the Court of First Instance – namely, that even when there is no firm evidence of strong market transparency, such transparency may be presumed in various market circumstances - was not upheld by the European Court, but neither did the European Court explicitly dismiss the alternative test, or object to the statements made in that respect by the Court of First Instance. This means that the alternative test remains available for consideration in future cases, albeit without any clear-cut authority or approval. One commentator raises the question whether the European Court’s non-objection “begs the question of whether nuances have thereby been introduced into the Airtours test.”

Sixthly, the second condition in Airtours relates to the need for an incentive not to depart from the common policy. The incentive need not be the existence of any special retaliatory mechanism, and, depending on the circumstances, a competitive response to the behaviour of the deviating party may be sufficient. In Airtours this condition was determined on an imputed knowledge basis, and each of the competitors was assumed to know the way the market works and the consequences of taking unilateral action. On the other hand, the analysis of what the operators could and should know is essentially an objective one which allows the relevant knowledge to be imputed to them.

Seventhly, the third condition in Airtours requires that the foreseeable reaction of customers and competitors, even those not currently in the market, will not jeopardise

562 Ibid, [121]
565 “...each member of the dominant oligopoly must be aware that highly competitive action on its part designed to increase its market share would provoke identical action by the others, so that it would derive no benefit from its initiative...”, Airtours plc v Commission of the European Communities [2002] 5 C.M.L.R. 7, 334 [62]
the achievement of the common policy. Satisfaction of this condition requires a careful evaluation of the capabilities of other competitors and consideration of their commercial interests in the circumstances. It also requires consideration of the choices open to consumers, and whether they might have some form of effective countervailing power.

Lastly, there is a suggestion in Sony that in a tight oligopolistic market with substantial indicia of collective dominance, that an analysis might conclude that this is sufficient for there to be collective dominance. This would be subject to an assessment whether the transparency is sufficient to sustain effective monitoring of compliance with the common policy. This has been regarded as an alternative means of showing that the operators concerned are collectively dominant in the market.\footnote{Golding, J, 'The Impala case: a quiet conclusion but a lasting legacy', (2010) \textit{E.C.L.R.} 31(7), 261, 266}
Chapter 7: Collective dominance and tight oligopoly: the case of telecommunications

Introduction

This chapter examines telecommunications markets as a specific case that has attracted attention in terms of collective dominance and in which theories based on tight oligopoly are also being considered.

The chapter considers the history and characteristics of telecommunications markets and the reasons why markets for network services are persistently oligopolistic. In consequence they are markets where the potential for collective dominance needs to be considered at all times, but also they are markets where ex-ante regulation based on tight oligopoly alone may warrant consideration.

A number of specific cases of alleged collective dominance will be considered, all from the period of early network liberalisation in the early part of this century. All of the cases were considered, at the time they arose, in terms of the approach to collective dominance set down in the Airtours case.

The chapter will conclude that for a range of reasons, including the existence of pervasive ex-ante regulation of wholesale and retail markets, telecommunications markets are unlikely to be ideal candidates for the application of collective dominance on the Airtours model.

Other approaches to oligopolistic regulation of telecommunications markets and their likely efficacy are discussed in this chapter.

Telecommunications industry history and natural monopoly characteristics

Telecommunications is an industry that has always had a persistent tendency towards high levels of concentration and oligopoly, and this has continued to be the case following liberalisation and the introduction of competition.

From the beginning it had been recognised that telecommunications was a networked industry in which the value of the service to individual customers depended on the overall number of services connected. The provision of services of value to potential subscribers requires a substantial initial and ongoing investment in network equipment and systems. Networks have to be built in advance of the provision of services.
Substantial infrastructure requires substantial investment and a potentially long payback period, if services are to be priced to attract early subscription. The risks involved are substantial as well. For this reason in many countries the risk was taken over at an early stage by governments through nationalisation of the network or by regulation guaranteeing private owners protection from competition in exchange for the provision of a reliable regulated utility service.

Also from an early stage in the industry’s history, there has been emphasis on innovation to reduce the costs of service. Call switching systems made an early appearance, and the development of network nodes to reduce the high cost of dedicated lines to individual premises. In addition, local network design extended the emphasis on concentration with feeder networks serving street cabinets and enabling the number of dedicated cables to premises, and therefore costs, to be reduced compared to other design possibilities.

Telecommunications networks, and especially the local component connecting premises to the nearest node, have been recognised as natural monopolies for some time. This means that, because the fixed costs and potential for scale economies are so high relative to the total demand, it is not economic to duplicate the network. Multiple local companies, especially those with overlapping service coverage, were recognised not to be viable. In Australia, the telecommunications network was a national state-owned monopoly from Federation. In the United Kingdom the nationalisation program of 1912-13 recognised that the private sector patchwork of local networks was

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567 Subscription prices or access rentals are set having regard to the longer term average cost when the capacity of the network concerned is more fully utilised. The alternative would be to price on short term average costs and deter service take-up. Pricing therefore needs to be appropriate to finance on-going operations and future investments, over the longer term. It must therefore be sufficient to meet the ‘revenue requirement’, and telecommunications price regulation has been traditionally based on this. H Intven (ed) Telecommunications Regulation Handbook (2000 The World Bank, Washington) 4-1

568 For the US version of the regulated utility compact as envisaged by Theodore Vail of AT&T see Stone, A, Wrong Number: The Breakup of AT&T (Basic Books Inc, New York, 1989) 44

569 Manual telephone exchanges were operating in all Australian capital cities except Perth by 1883, within 7 years of the telephone patent awarded to Bell: Moyal, A, Clear Across Australia: A History of Telecommunications (Thomas Nelson, Melbourne, 1984) 78


571 See, for example, M. Cave, “Economic aspects of the new regulatory regime for electronic communications”, in Buigues, P A and P Rey (Ed), The Economics of Antitrust and Regulation in Telecommunications: Perspectives for the new European Regulatory Framework (Edward Elgar, 2004), at 29 and 34

572 Moyal, A, Clear Across Australia: A History of Telecommunications (Thomas Nelson, Melbourne, 1984), 18-87
not going to ensure the development of a nationwide utility. In the United States, Theodore Vail was able to successfully coordinate independent local companies to form the Bell System from 1907.

**Capital requirements**

The development of national telecommunications with substantial infrastructure connecting all subscribers on a national or regional basis involves substantial capital investment over the long term. For these investments to be viable and to enable affordable retail prices the cost of capital has to be commensurate with low risk financing. The monopoly compact with the State established the conditions on which such funding is based.

The monopoly agreement or compact was reflected in legislation that provided for regulation of the network operator in exchange for an exclusive charter, and protection against any form of competitive entry. The national monopoly characteristics of telecommunications would have been a significant deterrent in any case to a new entrant seeking to replicate the incumbent operator’s network and business. However, other aspects of monopoly operation—and especially the existence of substantial cross-subsidies—would have encouraged entry into the highly profitable parts of the business. This is known as ‘cream skimming’ and is precisely the sort of entry that governments were prepared to guard against.

**Network Effects**

An important characteristic of telecommunications services, and one that promotes concentration, is the existence of strong network effects—that is, the extra value that arises for all subscribers from the connection of additional subscribers. It follows that, other things being equal, the larger the subscriber base the larger the potential network effects for an individual network, and also that amassing the largest possible subscriber base is important in building the value proposition for retail customers. A potential

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573 Telephone Transfer Act 1911 (UK)

574 Stone, A, Wrong Number: The Breakup of AT&T (Basic Books Inc, New York, 1989) 47

575 For example, Telecommunications Act 1975 (Cth), where the Telecommunications Commission was tasked with the provision of telecommunications services (section 5), and was empowered to authorise others to establish networks (section 13).


subscriber would be more likely to subscribe to a service from a larger network than a smaller one.

If telecommunications networks are interconnected so that they are inter-operable then the network effects will be sector wide so that a new connection to one network will add to the value of connection of all subscribers, whether they are connected to the same network or another.

**Returns to scale**

Telecommunications networks exhibit pronounced returns to scale because of their high fixed cost component. This means that the incremental cost of adding additional subscribers to the network are low and the average cost per subscriber continues to decrease with size as fixed costs are shared over a greater number of subscribers.  

Economies of scale are important because they entrench the economic advantage of incumbent network operators and constitute barriers to new competitive entry to the market if the economies continue for a substantial part or most of the market demand. This means that a new entrant cannot be cost competitive until it achieves that scale which is necessary to deliver unit costs similar to established entrants and incumbents in a market.

The extent of the economies of scale depends on the technology being used for the design of the network. For example the returns to scale tend to be exhausted much sooner with cellular mobile technologies than with the relatively traffic insensitive local access network component of fibre or copper networks. Microwave systems also are recognised as having limited scale economies compared to both cellular mobile and copper wire systems.

The importance of returns to scale is that new entrants need to build scale fast to match that of the incumbent or, through regulatory intervention, to be able to access incumbent services and network facilities at a price that enables them to enjoy the scale

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580 European Commission, Commission Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, paragraph 17
achieved by the incumbent. This scale equivalence, therefore, might be provided via access regulation\textsuperscript{582} such as mandated wholesale access where the scale economies of the incumbent or larger established operator are shared through regulated wholesale access pricing with the new entrant. It is also the case that if the economies of scale are not exhausted until demand levels approximate the demand levels for the whole of the sector then the benefits normally attributed to competition will not be available. Splitting available demand amongst different network operators under these conditions will reduce potential returns to scale for all service providers and therefore reduce overall efficiency in the sector. This is a situation in which competition may reduce rather than promote efficiency.

Absent regulation, therefore, incumbents and established operators would usually have every incentive to refuse to provide wholesale access services to competitors. They would have every incentive to maximise their own customer base and only to provide access on their own terms.\textsuperscript{583} This also reinforces the tendency of the sector towards market concentration because refusal to provide wholesale access would undermine and deter new entry to the market.

**Commodification**

A commodity is a good or service of reasonably well-defined or well-understood characteristics which may be treated as effectively the same and interchangeable with another of its kind. Commodities in the same quality category are fungible.\textsuperscript{584}

Telecommunications services are in this category, especially at wholesale levels where the customers are as technically proficient as the providers. At retail level the services are typically commodities as well, but customer perceptions may be based on factors not intrinsic to the service, such as branding or their perceived treatment by provider staff. Telecommunications services are largely interchangeable, so that a voice, data or text service from any source of a given quality is much like such a voice, data or text service from any other source at the same quality. From the point of view of the user the experience of a service on one network would therefore be very like the experience

\textsuperscript{582} Such as, for example, Directive 2002/19/EC of the European Parliament and Council of 7 March 2002, (the Access Directive) which provided for access and interconnection of electronic communications networks

\textsuperscript{583} Productivity Commission, *Telecommunications Economics and Policy Issues* (Commonwealth of Australia, Canberra, 1997), 63 and 88

\textsuperscript{584} Macquarie Dictionary (Macquarie Library, NSW, 1985) 715
of the same category of service on another network. Under these circumstances the
service will be effectively a commodity and competition will be played out on
dimensions other than those related to the technical characteristics of the service itself.

**Commodification and price competition**

Competition in commodity markets is generally price competition. At retail levels it
may be influenced by brand differentiation as well. With commodities the quality is
usually known or understood, so price tends to be the dimension remaining for the
expression of competition. Service providers may seek to complicate and adorn the
message by offering various options and price packages, including bundles of services,
but these too reflect price competition. The options and bundles serve to avoid head-on
competition around a single price point, and sometimes to achieve customer lock-in for
a time, but the fundamental dimension of competition is price in these cases.

In order to maintain margins while competing on price, telecommunications service
providers have every incentive to reduce their costs of operation. As competition
increases the result will be greater concentration in the market, through mergers,
acquisitions and exits. Maintaining profit margins under these circumstances will likely
be achieved through increased scale and reducing overhead and fixed costs per unit of
service.

Therefore the commodity characteristics of telecommunications serve to reinforce the
tendency to concentration in telecommunications markets, already referred to.

**The evolution of market liberalisation**

The monopoly compact inevitably led to substantial cross subsidies that became
entrenched as the revenues from high margin services were applied to the losses caused
by the social pricing (including both low margin and below cost pricing) of mass services.
The purpose was in effect to increase early service adoption and to increase the value of
the network and the level of network effects at the earliest time.

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585 “Commodity markets emerge when purchasers view suppliers as identical on all factors but price.
...There is only one winner in a commodity market—the lowest cost supplier—except in periods of high
demand when supply falls short of demand.” : *Winning Without Competition: How to Break Out of a
Commodity Market*, (Plantes Co, Wisconsin, 2011) 11. Also Falshaw et al, *Local Service Competition:
Breaking the Bottleneck*, (Ovum, London, 1998), 113: “Commoditisation: The treatment of all services as
interchangeable will increase as the underlying network and system capabilities of operators converge in a
highly standardised digitised world.”
Cross subsidies that have been identified include

- from large users to smaller users\textsuperscript{586} – through uniform tariffs and single part tariffs;
- from long distance to short distance;\textsuperscript{587}
- from usage to access;\textsuperscript{588}
- from business to residential subscribers;\textsuperscript{589}
- from urban to rural areas;\textsuperscript{590} and
- inter-generational, from later subscribers to earlier subscribers.\textsuperscript{591}

As telecommunications markets became liberalised, new entrants were naturally attracted to the high margin areas, such as to urban, business, high value services and to long distance and international calling services, leading to the prospect of inefficient entry based on responses to inappropriate pricing signals in non-competitive markets.\textsuperscript{592}

Once substantial investment in networks had been undertaken the entrants, by now well entrenched, had every incentive to maximise the utilisation of their networks and the scope of their menu of offerings. New networks were digital, multi-media platforms so they were well positioned as platforms for convergent services.\textsuperscript{593}

**Abiding tendency to oligopoly**

There is a need to price above marginal cost levels in order to recover the high fixed costs of telecommunications infrastructure and to provide a funding source for those services subject to social (that is, subsidised) pricing obligations.

The profits from above cost price levels in the monopoly era were soon competed away as new entrants targeted these service markets, and many long distance resellers could

\textsuperscript{586} For example, through uniform tariffs and single part tariffs
\textsuperscript{588} Ibid, 223
\textsuperscript{589} This is another version of cross subsidies from large users to small users. Moyal, A, *Clear Across Australia: A History of Telecommunications* (Thomas Nelson, Melbourne, 1984), 307
\textsuperscript{590} Ibid, 307
\textsuperscript{591} This occurs if current users pay prices that do not contribute to capital leaving replacement costs for future users to cover.
\textsuperscript{593} Laffont & Tirole, above footnote 577, at 273, but the limitations that have been encountered in practice as incumbents seek to move from specialised service networks to single multi-media, multi-service digital platforms have also been well documented as in, for example, Rogerson, D A, Interconnection Charging Models, (ITU, GSR13, 2013)
no longer be sustained by the reducing margins. They either closed down or sold their businesses for the value of the customer bases they had amassed.\textsuperscript{594} In this way fixed costs were rationalised and applied to a larger subscriber and transaction base.

Niche markets develop and then are hollowed out.\textsuperscript{595} This appears to be an ongoing process and does not weaken the proposition that telecommunications has a tendency towards concentration. In fact it tends to support the idea that innovation encourages niche development but that the niche services are eventually universalised and “hollowed out” over time as larger entities adopt the innovation or incorporate the niche-based competitors through acquisition or merger.\textsuperscript{596}

New technologies are not necessarily the basis for niche businesses. This will depend on the costs of research and development, and of commercialisation. The scale of capital investment required may dictate that major new technologies can only be adopted by market participants with access to substantial capital. New technologies are either mainstream from the start or become so. The alternative is that they become stranded investments and are soon bypassed by later developments.

The telecommunications carriage market has always tended to concentration, as evidenced by the rationalisation of ISPs from the mid-1990s to today\textsuperscript{597}; the reduction of resellers from the early 1990s until now; and the amalgamation of the Regional Bell Operating Companies in the United States since the divesture in 1982.\textsuperscript{598}

**New technologies**

New technologies in telecommunications have changed the nature of the market and the opportunities for both competition and, ultimately, for rationalisation on a broader front.

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\textsuperscript{594} Falshaw et al, *Local Service Competition: Breaking the Bottleneck*, (Ovum, London, 1998), 151

\textsuperscript{595} Ibid: Reduction of niches is seen as one consequence of convergence in the sector.

\textsuperscript{596} Ibid, 112

\textsuperscript{597} For example in Australia in 1998 there were around 500 registered Internet Service Providers registered with the Telecommunications Industry Ombudsman (Productivity Commission, *International Benchmarking of Australian Telecommunications Services*, 1999, Melbourne, 33). In August 2013 the number listed amongst members on the website (\url{www.tio.com.au}) is approximately 150. 143 are listed on the Yahoo Directory (\url{http://dir.yahoo.com/business_and_economy/business_to_business/communications_and_networking/internet_and_world_wide_web/network_service_providers/internet_service_providers_isps_/by_region/countries/australia/complete_list/?b=120}) Similar levels of rationalisation have occurred in other countries over this period.

\textsuperscript{598} Of the seven Regional Bell Operating Companies at the time of the AT&T Consent Decree in 1982 and after acquisitions, mergers and name changes, only three remain as of 2013 – AT&T, Qwest and Verizon
In some cases new technologies have provided new and sustainable ways of entering and competing effectively in markets formerly considered to be natural monopolies.599

Some new technologies, such as cellular mobile, have in a relatively short time transformed the market by arousing new mass demand that has changed the circumstances affecting the provision of all services.600

The important point is that the industry is evolving with substantial change occurring at all levels. The abiding tendency towards concentration is not the only tendency in play. The tendency towards concentration is continually affected by transformative or disruptive change, until new norms and new tendencies towards concentration become established in turn.

**Convergence and new markets**

The past patterns of the telecommunications industry may well be changing in quite new directions as a result of convergence at technology, market, service and service provider levels.601 The ubiquitous adoption of internet protocol digital technology and the consequent development of multimedia platforms means that service providers from historically distinct sectors, such as electronic media, communications and computer processing, have increasingly overlapping skills, technologies, capacities and customers. This changes the competitive landscape but does not necessarily change the constant tendency towards industry concentration and oligopoly in telecommunications. Electronic media and computer processing, at various levels, are increasingly concentrated industries as well.602

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599 For example, cellular mobile has enabled competition in the personal communications services market competing with and, for many people, substituting for fixed network access.

600 The International Telecommunications Union (ITU) statistics for 2013 show, worldwide, 1.171 billion fixed telephone subscriptions (16.5 per 100 population) compared to 6.835 billion active cellular mobile subscriptions (96.2 per 100 population): [http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx](http://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx)

601 For example, the potential capacity of fibre cables used for backhaul transmission and broadband service delivery means that a new threshold point may have been reached, with the inevitable re-monopolisation if fixed broadband infrastructure services.

602 Indeed competition is increasingly inter-modal (for example between traditional electronic media and new media (radio and television versus internet delivery on personal screen devices) and between different devices (tablets versus laptops and personal computers), with concentration intra-modally. On the overall impact, see D Townsend, *Colloquium No 6 Briefing Report: Implications of Telecommunications Convergence* (ITU, Geneva, 1996); and Organisation for Economic Cooperation and Development (OECD), "Convergence and Next Generation Networks", DSTI/ICC/CISP (2007) 2 Final, 17. This process of increased inter-modal competition as a result of convergence continues, as evidenced by more recent OECD reports such as *Digital Convergence and Beyond: Innovation, Investment and Competition in Communication Policy and Regulation for the 21st Century*, OECD DSTI/ICC/CISP (2015) Final.
**Consequences of oligopolistic tendencies**

The characteristics of telecommunications markets and technologies have fed an ongoing tendency towards concentration. This is the case notwithstanding the liberalisation of the telecommunications markets of most countries since the 1980s and especially in recent times. Nor has the tendency been reversed or substantially altered by convergence with other markets that are based on electronic technologies such as the electronic media and computer processing.

This tendency means that competition in the sector is unlikely to become sustainable in future without continuing regulatory oversight in some form. The tendencies that enable particular competitors to attain positions of dominance in the market, at least for a time, either through merger and acquisition, withdrawal of competitors, or various forms of cooperation or understanding, are unlikely to change in the foreseeable future.

Telecommunications and ICT are the basis for the digital economy and the public internet, and for the massive social and economic revolutions of the past 20 years, and therefore are fundamentally important for social and economic development in the future. Competition in this sector will therefore continue to attract intensive policy attention. We should expect that this sector will be in the vanguard of efforts to better regulate oligopoly in future.

The forces that have led to concentration and oligopoly are continuing, so the outcomes are likely to continue as well. Indeed, with substantial convergence at many levels, the value chains that have developed over time are now in a substantial state of flux, and this is a time when opportunities for new alignments and new forms of cooperation, rather than competition, will be increased.

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603 There are diverse views on whether telecommunications regulation should be or will be a transitional need required until such times as the sector becomes sustainably competitive, or, on the other hand, whether there should be or will be a need for continuing regulation, albeit of a changing character as the industry develops and transforms. The first view is expressed by, for example, N S Economides in “Telecommunications Regulation: An Introduction” in R R Nelson (ed.), *The Limits and Complexities of Organisations* (2005, Russell Sage Foundation Press, New York).72. The latter view is expressed by M L Katz in “Antitrust or Regulation? US Public Policy in Telecommunications Markets”, in Buigues and Rey (eds) (2004), op cit, 243 ff.

604 Information and Communications Technologies
Collective dominance in European telecommunications – recent case history

In 2002 the European Commission adopted a number of measures to require member states to review their electronic communications markets and to take action to address markets characterised by significant market power. These measures were part of an overall shift towards a European Union-wide (or “Single”) competitive market in this sector, which had commenced in 1998.

The Framework Directive of 2002 required national regulatory authorities in each member state to “define relevant markets appropriate to national circumstances and then to “carry out an analysis of the relevant markets.”

The Framework Directive also provided criteria to guide the assessment of collective dominance, and reflected the approach to collective dominance to be found in Gencor and Airtours. The guidance in the Annex to the Directive provides that:

Two or more undertakings can be found to be in a joint dominant position within the meaning of Article 14 if, even in the absence of structural or other links between them, they operate in a market the structure of which is considered to be conducive to coordinated effects.

The Annex then says that the appropriate structure is likely to be conducive “where the market satisfies a number of appropriate characteristics, in particular in terms of market concentration, transparency and other characteristics” listed. Fourteen market characteristics are listed, namely:

607 Framework Directive, Article 15.3
608 Ibid, Article 16.1
609 Ibid, Article 14.2, with criteria for joint dominance in Annex II
610 Gencor Ltd v Commission [1999] 4 C.M.L.R. 971
611 Airtours plc v Commission of the European Communities [2002] 5 C.M.L.R. 7
612 Framework Directive, Annex II. Also see the previous discussion on the Framework Directive, Art. 14 above Footnotes 66 and 114, and following.
613 These characteristics are discussed above Footnote 249 and following at some length, and the list is reproduced here for convenience.
- mature market
- stagnant or moderate growth on the demand side
- low elasticity of demand
- homogeneous product
- similar cost structures
- similar market shares
- lack of technical innovation, mature technology
- absence of excess capacity
- high barriers to entry
- lack of countervailing buying power
- lack of potential competition
- various kinds of informal or other links between the undertakings concerned
- retaliatory mechanisms
- lack or reduced scope for price competition

The list is “not an exhaustive list, nor are the criteria cumulative”. No criterion or group of criteria are sufficient or necessary for collective dominance, or, therefore, determinative of the issue.

The national regulatory authorities in all member states commenced the process of examining various telecommunications service markets for both dominance and collective dominance as required by the Commission, from 2002. Some, such as OFTEL in the United Kingdom, began the process of examination of collective dominance in some sectors much earlier. The process continued to 2009. A limited number of cases of collective dominance arose as a result of that exercise, mostly in relation to the

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614 Ibid. These criteria are from the SMP Guidelines (Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, (2002/C 165/03), [97]
615 Ibid
wholesale market for access and call origination on public mobile telephone networks (the “MACO” market), each of which is considered below.

**Vodafone and O2, Ireland**

In 2004, ComReg, the Irish regulator, conducted a market analysis and identified a market for the provision of mobile access and call origination, which consisted of “all wholesale access and origination services provided by a Mobile Network Operator (MNO)”.

ComReg concluded that the “broad scope of the relevant wholesale market reflects the ability of Electronic Communication Network (“ECN”) providers to address the retail market for mobile communications services, which includes all mobile services sold to end users as a ‘cluster’ of services.”

ComReg found that the essential conditions warranting a finding of collective dominance were satisfied. ComReg had particular regard to the criteria discussed by the Court of First Instance in *Airtours*.

ComReg was concerned about the market power of two of the four mobile network operators in the market, Vodafone and O2. Vodafone and O2 were the largest operators in the Irish mobile services market. In aggregate they held 94% of market share as measured by subscribers, and 97% of market share as measured by revenue.

ComReg noted that many factors “demonstrate that there is a prima facie case for joint dominance,” such as a highly concentrated market, very high market shares held by O2 and Vodafone; market share held by O2 being relatively stable since the beginning of 2001 (over 3 years); new competition (Meteor) has not disrupted the market “and remains on the fringe of substantial segments within the market,” prices being relatively high and stable in the post-paid segment suggesting lack of competition; high

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617 Ibid, 4 [1.5]
618 Ibid, 4 [1.6]
619 Ibid, 5 [1.13]
620 Ibid
622 Ibid, 31 [4.6]
623 Ibid, 36 [4.17]
624 Ibid
625 Ibid. In this ComReg is referring to the pre-paid and the post-paid segments
entry barriers; high profitability; and evidence of parallel behaviour by O2 and Vodafone in the market.

ComReg recognised that in other cases, such as France v Commission\textsuperscript{626}, which it cites, a “market share of approximately 60% ... cannot of itself point conclusively to the evidence of a collective dominant position”.\textsuperscript{627} However ComReg misinterpreted this as a problem with the size of the combined market share, rather than a conceptual problem with the notion of a combined market share determining collective dominance under any circumstances. The relationship of the individual market shares was very important because similar individual market shares, in a context where the shares are high, will indicate that market reach, cost structure and other factors may be so similar that there is no obvious advantage that either has in order to compete with the other. But ComReg continued with the notion that if 60% combined market share is not enough, then surely 94% is. ComReg stated:

... it is clear that combined market shares as extraordinarily high as those witnessed in the Irish market will normally be considered to “provide incentives for anticompetitive behaviour”.\textsuperscript{628}

High combined market share does not necessarily create an incentive for anticompetitive behaviour. The opportunity for such behaviour may arise because the operators concerned might have similar cost structures, suggested by similar high market shares that provide each with most of the available scale economies, and the extent of overall penetration of the market might suggest that cooperation could deliver better commercial outcomes than competition.

ComReg considered that the case law permitted a finding of collective dominance to be based on the existence of structural links between relevant firms. But ComReg also considered that, as an alternative, “a finding of collective dominance can also be made in relation to an oligopolistic market whose structure is conducive to coordinated effects (i.e. anti-competitive behaviour) on the relevant market, without recourse to the

\textsuperscript{626} France & Others v Commission (“Kali und Salz”), Joined Cases C-68/94 and C-30/95
\textsuperscript{627} Ibid
\textsuperscript{628} Commission for Communications Regulation (ComReg), Ireland, Market Analysis - Wholesale Mobile Access and Call Origination (Response to Consultation Document 04/05), Document No. 04/118 and 118a (Dublin, 2004), 36-7 [4.19] Com Reg is citing Rhodia/Donau Chemie/ Albright & Wilson, Case IV/M. 1517 at paragraph 61 – an earlier, 1999, case before the European Commission.
existence of certain structural links.”⁶²⁹ In this respect, ComReg is citing the SMP Guidelines that were developed by the European Commission at the time, but the Guidelines themselves purported to reflect and suitably capture the case law to that point. ⁶³⁰

In deciding that Vodafone and O2 held a position of collective dominance in the mobile access and call origination market ComReg concluded that it was “of the view that the existence of a number of structural links between Vodafone and O2 … increases the likelihood that Vodafone and O2 are aware of their common interests in ways which are conducive to the creation and maintenance of a position of collective dominance…”⁶³¹

ComReg considered that the market power of Vodafone and O2 was reinforced by a number of market factors, including the size of the operators relative to each other and to other participants in the relevant market, their control of essential infrastructure, their sustained levels of profitability, economies of scale resulting from membership of large European mobile groups; and highly developed distribution and sales networks. ⁶³²

Vodafone had a market share of 54% at the time of the decision. O2 had a market share of 40%. ComReg held that even O2 had “a relatively large share of the market…”⁶³³ and therefore had a stake in maintaining the excessive profit associated with its existing customer base, rather than risk it through deviation from a common position. ⁶³⁴ Furthermore, ComReg considered that while the market shares of Vodafone and O2 were not identical, the share of O2 “is sufficiently large to indicate that it has an incentive to engage in behaviour that gives rise to co-ordinated effects.”⁶³⁵

ComReg referred to the frequent interactions that occurred between Vodafone and O2 as providing an incentive to coordinate:

⁶²⁹ Ibid, 37 [4.21]
⁶³⁰ SMP Guidelines (Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, (2002/C 165/03), O.J C 165/6, 11.7.2002). At paragraph 94, as cited by ComReg, the European Commission refers to Gencor and Compagnie Maritime Cases.
⁶³¹ ComReg, Ireland, Market Analysis – Wholesale Access and Call Origination on Public Mobile Telephony Networks, Document 05/14, Decision No D04/05 of 22/02/2005, [2.3]
⁶³² Ibid, [2.5]
⁶³³ ComReg, Ireland, Market Analysis - Wholesale Mobile Access and Call Origination Response to Consultation Document 04/05, Document No. 04/118 and 118a (Dublin, 2004) [4.42]
⁶³⁴ Ibid
⁶³⁵ Ibid, [4.43]
There is frequent interaction between the firms in this market where there are millions of individual consumers and a number of ‘churning’ customers on the demand side every month. This interaction also has a structural dimension, insofar as Vodafone and O2 frequently interact with one another through their common participation in various practices common to a networked industry (refer back to discussion on ‘structural links’). 636

Unfortunately, the discussion on structural links in this case was largely about the concept in the case law and about recent case law not requiring such links for collective dominance. ComReg did not examine the structural links, or the interactions on which they might be based, in sufficient or compelling detail. “Various practices common to a networked industry” may include many practices and interactions that are essentially adversarial, and where common interests are least on display. For example, coordinating on matters relating to interconnection and the monthly interconnect billing cycle are fraught with possibilities for disagreement and for references to the regulator to arbitrate. In similar vein, the examples used by ComReg, relating to ‘churning’ or movement of customers between the operators, are typically not interactions that are likely to emphasise any common interests between the operators, but, rather, win-lose opportunities in the churning process. In conclusion, ComReg offered no example of interactions between the operators that are likely to present opportunities for commercial cooperation. ComReg did not examine interactions in any depth or with any insight about how they might be reasonably likely to highlight or advance common interests.

The same lack of detailed assessment applies to ComReg’s determination where it listed, but failed to examine, factors such as the size of the operators relative to each other and to other participants in the relevant market, their control of essential infrastructure, their sustained levels of profitability, economies of scale resulting from membership of large European mobile groups; and highly developed distribution and sales networks. 637 For example, identification of essential infrastructure has not been undertaken. If the infrastructure is to be taken to mean mobile base stations and other sites with network equipment, the two smaller operators, 3 Ireland and Meteor, were in the process of replicating the larger networks. Presumably the business case of the smaller operators

636 Ibid, [4.47]
637 ComReg, Ireland, Market Analysis – Wholesale Access and Call Origination on Public Mobile Telephony Networks, Document 05/14, Decision No D04/05 of 22/02/2005, [2.3]
suggested that they could do so economically and, after achieving traction in the market, profitably. Another example is the economies of scale that Vodafone and O2 might have as a result of being part of larger European corporate groups. ComReg did not examine this statement further and identify the precise area where such economies might arise – such as in purchasing scale – and whether they do arise in this case. The last example above relates to having a highly developed distribution and sales network. This is hardly relevant to collective dominance if the smaller operators also have such arrangements. The point about having comprehensive distribution and sales networks, especially for purchasing credit for prepaid mobile accounts, is if these networks are not available for use by the smaller operators and there are no equivalent networks available to them. This examination was not undertaken by ComReg. Indeed, the point seems to have been missed altogether.

One important aspect of the examination by ComReg was that it had an assessment horizon in contemplation, as do all national regulatory authorities in Member states in undertaking the market analyses required by Article 7 of the Framework Directive. A market assessment can only be prospective to the extent that the national regulatory authority can reasonably foresee the evolution of structural and other forces at work in such markets. The typical horizon for such assessments is 2-3 years, given the rapid pace of technological and market change in the sector.

Consequently, even though ComReg undertook an analysis of the likely impact of Meteor’s agreement to enter into a domestic roaming agreement with O2 and the 3G licence obligation for Vodafone to enter a similar agreement with 3 Ireland, ComReg considered that any constraint that might result in undermining the tacit collusion, or constrain the market behaviour, of Vodafone and O2 would be outside the period of the review. In addition, ComReg noted that “neither Vodafone nor O2 had concluded a national roaming agreement with a new mobile network operator in the absence of a

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639 ComReg, Ireland, Market Analysis - Wholesale Mobile Access and Call Origination Response to Consultation Document 04/05, Document No. 04/118 and 118a (Dublin, 2004) [4.70]
640 Ibid, [4.71]
641 Ibid, [4.104]: “ComReg believes that the national roaming agreement entered into between Meteor and O2 might pave the way for potentially more effective competition in the market, but believes that over the lifetime of this review it will not provide a sufficient constraining effect on O2 and Vodafone in the wholesale market, and in particular on indirect access.”
regulatory obligation to do so.\textsuperscript{642} The implication is that, if the regulatory obligations were to be removed, the arrangements would fail and access would be denied.

Vodafone, O2 and Meteor appealed the decision to the Irish Electronic Communications Appeal Panel on the grounds that the evidence used by ComReg to arrive at its conclusions, while consistent with tacit collusion, were equally consistent with non-cooperative or competitive behaviour by Vodafone and O2, and therefore that ComReg had failed to the requisite standard of proof to show that the market was not competitive.

However, in September 2005, after the hearing of the appeal had commenced, ComReg and the Appeal Panel agreed that the decision should be annulled, and the appeals upheld. There were no reasons offered by ComReg or the Appeal Panel, leaving it an open matter as to which individual issue or set of issues might have been important for the outcome or what new evidence or procedural abnormality had come to light.

**Collective Dominance in the MACO Market, France\textsuperscript{643}**

In 2005, the French regulator, ARCEP identified three mobile network operators (MNOs) as having joint dominance in the market for mobile access and call origination (MACO market). ARCEP’s position was based on a number of structural factors as set out in its notes on the case for BEREC.\textsuperscript{644} The three MNOs had close to 100% of the market share for the retail market. There were also a small number of Mobile Virtual Network Operators (MVNOs), resellers or enhanced service providers, in the market. The market was therefore highly concentrated. ARCEP also considered that there was an ability to coordinate in this market and that it was motivated by a common interest to deny service-based providers wholesale access to the existing mobile networks of the three MNOs.

ARCEP considered that the costs associated with losing market share in the retail market were greater than the benefits of developing the wholesale market, and that consequently the three MNOs had incentives not to grant wholesale access. Denial of

\textsuperscript{642} Ibid, [4.70]
\textsuperscript{643} Autorité de Régulation des Communications Électroniques et des Postes (ARCEP), FR/2005/0179 (2005)
wholesale network access was the focal point for coordination amongst the three MNOs.

There was a high degree of transparency in the relevant market because it would become apparent very quickly as each MNO could each monitor negotiations between other MNOs and an access seeker. Access seekers had incentives to negotiate access with all MNOs simultaneously, to maximise the pressure on each to MNO to agree terms before the wholesale access request was withdrawn. Even if this were not so, it would soon become apparent that a new retail operator was active in the market. So there was adequate transparency to monitor for cheating.

ARCEP proposed to designate the three established MNOs as having joint dominance, and to impose obligations to offer wholesale network access and to establish minimum requirements in the agreements for access. However the European Commission did not agree with the reasoning and proposed to open its own Phase II investigation. In response ARCEP withdrew its notification of the market review.\textsuperscript{645}

The information available does not enable a clear view on the reasons for the withdrawal by ARCEP. However BEREC considers that lack of evidence to support the proposed action might have been a factor in the withdrawal of the proposals.\textsuperscript{646}

As well, ARCEP did not examine important scenarios involving the smallest of the three MNOs and whether it had incentives to disrupt a joint refusal to provide wholesale network access. The retail market shares at the time of the three MNOs were 45%, 35% and 20%. These shares are not the same or similar, and while the shares of the two largest MNOs were beyond the point of inflection at which returns to scale become markedly reduced, the market share of the smallest was not.\textsuperscript{647} On this argument, the smallest MNO may have had a greater incentive to increase its retail share and deny share to new entrants than the others. More importantly, the cost structures of the two largest and smallest MNO were so different that they conceivably would not have a common interest or the opportunity to adopt a common policy. The two largest MNOs


\textsuperscript{646} BEREC (Body of European Regulators for Electronic Communications), ‘BEREC Report on Oligopoly analysis and regulation’ (Brussels, June 2015) \url{http://berec.europa.eu/eng/document-register} (accessed 21 August 2015), 68

\textsuperscript{647} European Regulators Group (predecessor of BEREC), \textit{Common Position of Symmetry of Fixed Call Termination Rates and Symmetry of Mobile Call termination Rates} (ERG (07) 83 final 080312), 2007, 92: The graph in Figure 18 suggests that returns to scale reduce significantly when market share exceeds 30%.
might have such a common interest, but, with 20% market share, the smallest MNO may have had a sufficient presence in the market to disrupt the otherwise cooperative implementation of their common policy.

An alternative view was put by the French Competition Authority, namely that it was possible that the smallest MNO “would grant access to its network, since it had less to lose in the retail market and more to win in the wholesale market, because it experienced overcapacity in its network.” The Competition Authority however recognised that the scenario presented by ARCEP was equally probable, and an ex post analysis would be required to determine which outcome resulted.

As noted above, in response to the European Commission’s view ARCEP withdrew its notification of the market review. The matter was therefore not determined, and, in any case, was superseded in 2009 when the 3G spectrum licences issued by ARCEP included obligations to permit wholesale network access on favourable conditions.

**Collective Dominance in the MACO Market, Spain**

In 2005 the former Spanish regulator, CMT, notified the European Commission of its assessment that three MNOs (mobile network operators) – Telefonica, Vodafone and Amena - were considered to be dominant in the Spanish wholesale MACO market. The market structure was conducive to coordinated behaviour. Only three of the four licensed MNOs were active in the market. CMT considered that the incentives to coordinate were supported by the cost structure symmetries of the operators and the high profitability being achieved by each.

Importantly, CMT identified the denial of wholesale access as the focal point for coordination. The market was sufficiently transparent to enable the operators to detect deviations and to take effective retaliatory action should one of their number

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649 Ibid.

650 CNMC Spain (Comisión Nacional de los Mercados y la Competencia), ES/2005/0350 – at the time the regulator was the CMT

grant wholesale access to a third party – namely, adopt the same approach and provide wholesale access as well. A price war could also ensue.\footnote{652}

The fourth MNO has been licensed in 2005 to provide 3G services. It had not launched its services, and effectively had no coverage at the time of CMT's market assessment. It had no capability to disrupt the coordinated activities of the other three MNOs.

The CMT did not find evidence of dominance at the retail level of the mobile market and did not propose to determine that the three MNOs were collectively dominant in the retail mobile services market. The European Commission took the view that this was acceptable provided the CMT was able to demonstrate how the retail level of profit was sufficiently high “to motivate the collective refusal of network access.”\footnote{653} The European Commission also noted that the CMT did not explicitly define a focal point at the retail level, which, if done, might have provided further support for the conclusion of a sustainable coordinated outcome at the wholesale level.\footnote{654}

The European Commission noted the importance in retaliating quickly to any deviation. The Commission also noted that the retaliatory mechanism identified by the CMT, allowing access to other third parties, may not amount to a quick retaliation when negotiation on terms and conditions is taking into account. These could be protracted and complex matters. The European Commission noted that CMT did not nominate a retaliatory mechanism at retail level, and that such a mechanism could be a credible tool for retaliation as well.\footnote{655}

In short, most of the comments from the European Commission were supportive of the CMT's conclusion and indicated where further support might be found. CMT provided additional evidence and its market analysis was adopted.

It is difficult to distinguish the key structural elements of the MACO market that led to a conclusion of collective dominance in Spain from the elements in the MACO markets in Ireland and France. In practice, the detailed evidence adduced appears to have made the difference. The reasons why ComReg abandoned its case and ARCEP withdrew its

\footnotesize{\begin{itemize}
\item \footnote{652} Ibid
\item \footnote{653} Ibid, 70
\item \footnote{654} Ibid
\item \footnote{655} Ibid
\end{itemize}}
case are not clear, however. In all three cases there were clear attempts to implement the principles from the decision in *Airtours*.

**Collective Dominance in the MACO Market, Malta**

In 2006 the Malta Communications Authority (MCA) completed its market review of the wholesale MACO market. The MCA concluded that the two established MNOs, Vodafone and Go Mobile, were jointly dominant in the wholesale market. There were only two MNOs in the market.

The MCA also concluded that market expansion had slowed, leaving little room for a third competitor to enter. Other factors supporting collective dominance were the high incentives to coordinate, product homogeneity, similar market share, similar cost structures, and tariffs above the competitive level. A focal point for coordination was found to be denial of network access to alternative providers at the wholesale level, and price at the retail level.

The MCA considered that reversion to a state of competition would be an adequate retaliatory mechanism for deviations at both retail and wholesale levels.

An effective punishment mechanism in an electronic communications market would commonly be the threat of reverting back to a state of normal competition. If the members of the oligopoly hold a sufficiently similar position in the market, a deviation from an agreed outcome and a reversion to normal competition would be detrimental for both.

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656 Malta Communications Authority, *Wholesale Access and Call Origination on Mobile Networks: Response to consultation document and final decision*, (21 November 2006)

657 Ibid, 22: In citing the Commission Guidelines, the MCA noted the key incentive was to be found in whether the characteristics of the market make it conducive to tacit collusion.

658 Ibid, 23

659 Ibid, 21, 24-6: The market shares based on subscribers of the two MNOs were close (51.5%;48.5%) and similar when based on originated minutes of traffic (55.1%;44.9%) and when based on revenues (58.5%;41.5%). At these levels the MCA concluded that “both operators enjoy a similar level of economies of scale.”

660 Ibid, 26-7: Both operators had network coverage of around 99%.

661 Ibid, 28, 35: In 2005 Vodafone had a return on capital employed of 42.09% and Go Mobile had 36.71%. These returns exceeded the cost of capital (2004) of 17%, and were well above some regional comparisons.

662 Ibid, 51

663 Ibid, 38
MCA noted that a deviation from the common outcome in the retail market would not be profitable for either firm because it would mean establishing a new price equilibrium below the then current retail level in which the retail: wholesale margin was 3:1.\footnote{Ibid, 39: As the MCA notes this is a high level and “sufficiently high to sustain further reduction in retail rates.”}

In the wholesale MACO market, the MCA considered that “if one of the operators had to grant access to a third party, the other operator would retaliate back by opening up its network and trying to attract any such service providers by offering better conditions. The MCA is of the opinion that a deviation from the agreed outcome at a wholesale level would trigger parallel behaviour from the aggrieved party and would restore back conditions of normal competition at wholesale level.”\footnote{Ibid, 42: The MCA recognised this problem, at least in part, when it noted that the initial MVNO would have a first mover advantage, even though “it does not necessarily mean that other MVNOs would not be able to compete effectively.”} The problem with this analysis is that parallel behaviour would involve even further entry of MVNOs into the market. This would not restore normal competition in the wholesale market, since there was no competition in the first place, and would exacerbate the problem caused by the initial deviation for both MNOs. Organising and implementing MVNO contracts is not something that can be accomplished quickly, so, if this is the retaliatory mechanism, it would not be contemporaneous with the deviation, and the delay may well impact on its efficacy.\footnote{Ibid, 50: The comments “invited the MCA to monitor closely developments at the retail level and the impact that a third operator would have on the future sustainability of the collectively dominant position.”}

A more likely retaliatory mechanism for wholesale deviation would be for the “aggrieved” MNO to become more price competitive in those parts of the retail market where the MVNO may be intended to operate, and, as a result, to nullify the benefits that the other MNO sought to achieve by permitting MVNO access. Such a response strategy could be implemented fairly quickly.

The MCA incorporated the comments of the European Commission\footnote{Ibid, 40} and confirmed its decision in favour of collective dominance.

The MCA’s analysis was very thorough in the Commission’s view and the conclusion of collective dominance was confirmed. The analysis was arguably more thorough than that of ComReg in Ireland and ARCEP in France dealing with effectively the same wholesale market situation. In the Irish and French cases smaller operators had been
licensed and in the Irish case the existence of a roaming agreement clearly weakened ComReg’s argument. Malta is a markedly smaller market than either Ireland or France. In the result, the key differences between the cases are matters for conjecture only, since the Irish and French regulators withdrew their analyses.

**Collective dominance in the MACO market, Slovenia**

A fourth case involving the wholesale market for mobile access and call origination (MACO) arose in Slovenia in 2008, when the then regulator, APEK, identified two of the four mobile network operators, Mobitel and Si.mobil, as being collectively dominant. At the retail level there were six providers, four MNOs and two resellers that used Mobitel’s infrastructure. Mobitel and Si.mobil held a collective market share of 89% in terms of subscribers, and the Mobitel resellers a further 7.5%. The two smaller MNOs had a market share of only 3.5%.

APEK based its decision in favour of collective dominance on a number of factors including:

- a heavily concentrated market, as evidenced by the market shares referred to above;
- strong incentives to coordinate because of high entry barriers to the market, lack of countervailing buying power and the similarity of the cost structures of Mobitel and Si.mobil;
- an ability to coordinate around the focal point, identified as a collective refusal to supply national roaming services;
- sufficient transparency to detect cheating, even during the negotiation process for access;

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669 Agencija za pošto in elektronske komunikacije. The decision is no longer available on the website of the new regulator, AKOS.


671 Ibid

672 Ibid: There was some evidence of pent up demand for such access, through failed negotiations with access seekers in the past.
• the enforceability of compliance through retail and wholesale retaliation.  

The European Commission expressed its “serious doubts” about the finding of joint dominance by APEK.  The Commission was impressed by the existence of four MNOs and two service providers in the market already, and stated: “At this stage, APEK provided unclear and ambiguous information concerning the stability of the alleged ‘collusive equilibrium’ between the two largest operators.” The Commission obviously considered that a more compelling argument needed to be made about the stability of cooperative arrangements when there are so many additional players in the market, some of whom may have the incentive and the ability to disrupt such arrangements.

APEK was given an opportunity to provide additional market data and to clarify the outstanding issues with the Commission. These issues related also to the existence of pent up demand and profitability levels (which did not seem excessively high by the Commission).

The Commission examined the individual incentives on Mobitel and Si.mobil to refuse wholesale access. Mobitel was already under regulatory obligations concerning the provision of wholesale access to the two existing resellers. That being the case, the Commission considered that the other MNO, Si.mobil, also had incentives to grant access on a commercial basis in order to generate some wholesale revenues. This put the failure of any potential MVNO to conclude an access agreement in a new light: “…the fact that no MVNO succeeded in concluding an agreement with the respective MNO” [that is, Si.mobil] might have actually meant that there were individual incentives to refuse access,” as opposed to collective incentives or a common policy.

APEK withdrew its notification and conducted a new market review in 2009. In the light of the new analysis, which showed that the MNOs were not comparable in terms of wholesale capacity, APEK proposed to conclude that Mobitel held a position of

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673 Ibid
674 Ibid
676 Ibid, [4]
677 Ibid
679 Ibid, 75
significant market power (SMP) in the relevant market. “Therefore, in the light of the new information, the fact that the respective MNO [that is, Si.mobil] did not grant access to its network was attributable to capacity constraints and not to competition foreclosure.”

In the event, the facts that emerged in the case determined that it was not one of collective dominance. However, the case remains useful to the study of collective dominance because of the need to consider whether the individual commercial incentives of the parties alleged to be operating cooperatively as collectively dominant competitors.

The market for broadcasting transmission services

In the same 2004-2009 period of market assessment, national regulatory authorities in the UK and Italy concluded that there was collective dominance in the market for broadcasting transmission services. These services involve the transmission of content between broadcasting sites, usually as a managed transmission service, rather than the lease of specific point-to-point transmission capacity.

Broadcasting transmission services in the United Kingdom

The UK regulator, Ofcom, found that the relevant markets were the market for the provision of analogue and/or digital terrestrial broadcast managed transmission services at national, regional, metropolitan and local levels. Ofcom found that two operators, Crown Castle and National Telecommunications Limited (NTL), were jointly dominant in the national market and that the regional, metropolitan and local markets were competitive.

Ofcom considered a range of factors in coming to this conclusion, including:

- market concentration: there were only two established operators in the market;
- market shares: the two operators had similar market shares;

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680 Ibid
681 Ibid, 76: UK/2004/0111
682 Ibid, 77
683 Ibid, 76
• incentives to coordinate: Ofcom considered that the market was mature with high barriers to entry, and in turn offered substantial incentives for the two operators to coordinate. The services were homogenous and the operators both had similar cost structures

• detection of cheating: the market was transparent according to Ofcom and cheating could have been readily detected;

• enforceability: even though most of the customer contracts were long-term (typically of at least 10 years), Ofcom considered that there was scope for retaliation by the non-deviating operator during the course of the revised contracts associated with the digital switchover process (that is, the reassignment of frequency spectrum from broadcasting to telecommunications);

• actual and potential market competition: Ofcom considered that the long term relationships that characterised this market resulted in limited scope for new or potential competition.

The European Commission questioned Ofcom’s finding of joint dominance. The Commission considered that Ofcom had not provided sufficient evidence of the opportunity or incentive for the two operators, NTL and Crown Castle, to engage in cooperative, anticompetitive behaviour, nor had it provided evidence that the alleged collusion was sustainable.684

The Commission’s analysis suggested that Ofcom had failed to establish a focal point around which the two operators could feasibly collude: “For example, as contracts in the managed transmission services market were generally awarded through single round bidding procedures, prices and other contractual terms were not transparent at all, which made collusion difficult.”685 The Commission used the concept of a focal point or focal proposition to refer to the dimension or matter in which the parties are alleged to have cooperated. In this case the relevant market dimension was the bidding process, but the focal point in other contexts could be price, capacity, or a refusal to deal and provide service.

684 Ibid, 77
685 Ibid
The Commission was also concerned about the low frequency of the interactions between the two operators, akin to a finite game. Collective dominance arrangements are best concluded in an environment in which there were multiple transactions (or repeated games) and which enabled operators to effectively confirm the focal proposition and the cooperative strategy through repeated online experimentation and adjustment. Transparency was therefore in doubt.

Having regard to the Commission’s comments Ofcom decided to withdraw the tentative conclusions made in relation to draft measures, and to revise them. Managed services were subsequently not included in the final determination.

Broadcasting transmission services in Italy

The Italian regulator, AGCOM, analysed the market for wholesale broadcasting transmission services into many sub-markets. In only one of these, the market for analogue terrestrial television broadcasting services, did AGCOM reach a finding of joint dominance.

The market was unusual in that there were six active operators. AGCOM focused on three of these operators. The two largest operators had a combined market share of 82%. The market was therefore considered to be concentrated.

AGCOM considered that the two largest operators had incentives to coordinate arising from effectively the same cost structures and offering the same services.

AGCOM identified the denial of access to infrastructure as the focal point around which there was an ability to coordinate. AGCOM considered the market was sufficiently transparent to enable cheating to be readily detected.

The largest operators held substantial radiofrequency spectrum and therefore had the capacity to enforce compliance. They also had the capacity to retaliate in the content

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686 Ibid
687 Ibid: Autorità per le Garanzie nelle Comunicazioni (AGCOM), IT/2006/0424
688 Ibid, 78
689 Ibid
690 Ibid
691 Ibid
and advertising market, since they were vertically integrated and had broadcasting businesses. 692

The imminent digital switchover for broadcasting service providers, with analogue broadcasting to be switched off, meant that there was a closing window of opportunity for new entry into the market, and that it was sufficiently proximate to make any entry unprofitable. A potential new entrant could not, in AGCOM’s assessment, reach a revenue level to recover investment in its own infrastructure. 693 Consequently, there was no possibility of a potential entrant disrupting cooperative arrangements in the market.

As a result of this assessment AGCOM proposed to designate RAIU and RTI, the two main operators for analogue broadcasting services as jointly dominant. However this would only be for the period of about 18 months prior to the planned digital switchover. 694

The European Commission agreed with the conclusions reached by AGCOM, but required further evidence to substantiate a number of points. For example, there was inadequate evidence of demand for the analogue service. Market shares were determined using a proxy measure (advertising revenues) rather than revenues associated with broadcasting transmission services. 695 BEREC observes that “it seems that … the fact that the time horizon of the review was short (the digital switchover was expected to take place thereafter) might have played a role in the Commission’s acceptance” of the conclusion that AGCOM reached. 696

The market for wholesale broadband access in Malta 697

The Maltese regulator, MCA, identified joint dominance in the wholesale market for broadband access in its first analysis of the market in 2007. There were two operators in the market at the time of the decision, Melita Cable and Maltacom. The European
Commission had serious doubts about the draft measure causing the MCA to withdraw it.\footnote{Ibid}

The MCA found that one of the characteristics that created an incentive for the two operators to coordinate was the homogeneity of the cable and DSL products in terms of functionality and price at both retail and wholesale levels.\footnote{Ibid} However the European Commission found that further factual evidence was needed to support this conclusion, especially in terms of service management arrangements for each service. The Commission also sought further information on the potential difficulties for Internet Service Providers (ISPs) if they sought to switch from a wholesale DSL service to a wholesale cable-based broadband service.\footnote{Ibid, 81}

The Commission also considered that the MCA had not addressed evidence that suggested a reasonable level of competition by European standards in the retail broadband market, such as reasonably high penetration, price levels (relative to Europe) and the variety of broadband offers available in the market (comparable to other European member states).\footnote{Ibid, 82} The Commission considered that the MCA did not provide a description of the retaliatory mechanism that would operate at wholesale level, and there were therefore doubts about the adequacy of any such measure.\footnote{Ibid}

The MCA withdrew the draft measure and reviewed the market again in 2008.\footnote{Malta Communications Authority, Wholesale Broadband Access Market: Identification and Analysis of Markets, Determination of Market Power and Setting of Remedies, (11\textsuperscript{th} April 2008) \url{http://mca.org.mt/sites}} In its Consultation Paper of 2008 the MCA considered that there were factors that favoured joint dominance in the wholesale broadband access market, such as having high similar market shares\footnote{Ibid, 44-5}; having similar levels of scale and scope economies; being vertically and horizontally integrated providers; not having any countervailing buyer power; market transparency; market approaching maturity; and similar cost structures.\footnote{Ibid, 75}

However, there were factors that counted against joint dominance, the most important of which was the change from little price competition to active price competition in 2007. In 2005 the MCA had issued three Broadband Wireless Access (BWA) licences to

\footnote{Ibid: ‘DSL” means direct subscriber line, being the local loop connecting the subscriber’s premises to the nearest network node (typically a telephone exchange) to provide broadband access.}
Vodafone and two other operators to enable them to provide broadband services using wireless technologies. In 2007 Vodafone introduce its WiMAX service and, later in the same year, it launched new broadband product offerings, including broadband only services. At that stage the incumbent broadband operators, Mileta Cable and Maltacom, took action to offer more capacity at lower prices for many of their broadband services.  

The MCA concluded “that in terms of broadband pricing and choice, the market entry of a third operator may have reduced the likelihood of coordination between the two major players.”

Importantly for the wholesale market, MCA noted that it “believes that Vodafone will soon be in a position to honour its licence obligations to make a commercial offer for wholesale broadband access.”

In outlining its conclusion, MCA was reluctant to move away too quickly form the position that it held in relation to joint dominance in this market the year before, and also posited an unduly high evidentiary test:

Although the MCA believes that there may still be a good case for regulation at wholesale level, it is not possible for the Authority to prove beyond reasonable doubt that Melita Cable and GO [go mobil] are engaging in a coordinated strategy to refuse wholesale access. Given the insufficiency of evidence, the MCA has no option but to declare that, within the constraints posed by the current regulatory framework, no operator in the wholesale broadband access market enjoys a demonstrated SMP position.

The MCA refers to the impossibility of proving beyond a reasonable doubt that the firms are engaging in a coordinated strategy. The MCA is not, in the author’s view, suggesting that an evidentiary standard relevant to the criminal law is required. If it were doing that the MCA would be clearly incorrect. The proceeding as a civil one and can be determined on the balance of probabilities. Rather, the MCA appears, in claiming to have been forced to conclude as it did, to be claiming that the evidentiary burden that

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706 Ibid, 75-6
707 Ibid, 76
708 Ibid
709 Ibid, 77
needs to be overcome is substantial and exceeds the resources (including data resources) at its disposal.

The issue of the body of relevant evidence being ambiguous in relation to collective dominance is a recurring one. The regulator must determine whether there is compelling evidence that on balance justifies a conclusion of collective dominance and a decision to interfere in the market. In the MCA case, the more recent evidence of third party disruption to parallel pricing behaviour that had been in place for some time, was compelling and suggested that, whatever might have been an appropriate conclusion before that disruption, the prospects for coordination in the immediate future – which was the focus of the MCA’s review – were materially reduced. Some of the characteristics of the market that favoured collective dominance were unchanged, but these characteristics needed to be weighted more lightly as a result of recent price competition.

In the cases referred to above the national regulatory authorities in member states of the European Union undertook market analyses as required by Article 7 of the Framework Directive. These cases arose after the Court of First Instance heard Airtours, during the period from 2004 and 2009.

The MACO market in Italy

A further case at national level during that same period, also influenced by the judgment in Airtours, involved collective dominance between mobile network operators in Italy. In 2004 the Italian competition authority or AGCOM began investigating the mobile telecommunications market and the conduct of the three mobile network operators, TIM (Telecom Italia Mobile), Vodafone and Wind which had refused to provide mobile virtual network operators (MVNOs) with wholesale access to their respective networks. The case therefore involved the MACO market, the wholesale market for mobile access and call origination, and an alleged refusal to deal similar to the Irish, Spanish and Maltese cases discussed earlier in this chapter.


711 Autorità Garante della Concorrenza e del Mercato (or AGCOM)
In 2007 the AGCOM closed its proceeding and declared that the evidence available was insufficient to demonstrate that the three mobile network operators held a collective dominant position.\textsuperscript{712} It followed that there was insufficient evidence that the refusal to provide access was an abuse of collective dominance.

The Italian Association of Internet Providers brought an action before the Regional Administrative Tribunal, the appropriate court.\textsuperscript{713} It was from the ranks of internet providers and other service-based providers that MVNOs were likely to arise.

The court adopted an approach that effectively reflected the requirements set out by the Court of First Instance in \textit{Airtours}. The court required three cumulative conditions to be fulfilled for collective dominance to exist: “first, the capability of firms to reach the terms of coordination; secondly, the presence of an effective mechanism of retaliation, which discourages defections from collusion; and thirdly, the absence of effective countervailing reactions of both competitors and customers.”\textsuperscript{714}

The court denied the plausibility of collusion in this case. In particular, the court drew attention to the asymmetries of costs, market shares and network features between TIM and Vodafone, on the one hand, and Wind, on the other. The gap was so large that the judges concluded that it impeded TIM and Vodafone from being able to determine what kind of market strategy Wind was implementing. The clear suggestion was that the circumstances of Wind and the others were so different that they would have different goals and strategies in the market, and that these differences would preclude the adoption of a common policy.

AGCOM had put forward some evidence of factors that would facilitate collusion such as high market shares, technical and administrative barriers to entry, homogeneity of networks in terms of coverage and other characteristics, and parallel prices for voice and message services.\textsuperscript{715} The body of evidence is therefore ambiguous on the matter of collective dominance, with some factors supporting such a conclusion and others not. In this case the court held that the evidence fell short of the threshold required for abuses of collective dominance.\textsuperscript{716} Filippelli notes that:

\textsuperscript{712} AGCOM, case 357, 8 March 2007, Tele2/TIM, Vodafone, Wind, in Boll, 29/2007
\textsuperscript{713} Tribunale Amministrativo Regionale del Lazio, Sez. I, no. 12538/2008
\textsuperscript{714} Filippelli (2010), at 81
\textsuperscript{715} Ibid, at 82
\textsuperscript{716} Ibid
When either structural or contractual or financial links are lacking between firms, this standard [the threshold standard] is even higher and competition authorities are required to demonstrate that conscious parallelism, which is a structural characteristic of oligopoly, comes from collusion rather than from independent, rational choices.\textsuperscript{717}

AGCOM placed substantial emphasis on asymmetry as an important factor in ruling out collective dominance. AGCOM took this line on the basis that there must be some reason why the operators would want to adopt a common policy, and if their circumstances in the market are sufficiently different then a common policy may not be available to cover their divergent interests. Significant asymmetry of market shares may result in sufficiently different levels of operational scale to cause unit costs to be also significantly different. If unit costs differ then cost advantages may arise which, one would imagine, an operator may wish to exploit in competition rather than waste in cooperation.

However, this analysis, if applicable, would likely only be relevant where price cooperation is the focus. Even in relation to price, cooperation may be feasible where the competitors have all exceeded the point after which scale economies are exhausted. This occurs because returns to scale are not in linear proportion to scale. In the case of mobile networks scale economies reduce rapidly, following an asymptotic function, after a market share of around 30-35\% of traffic is achieved. This is because mobile networks are essentially modular and the fixed costs of operation are largely amortised at around 30-35\% market share.\textsuperscript{718}

\textsuperscript{717} Ibid
\textsuperscript{718} This non-linear return to scale in the case of mobile networks can be readily demonstrated by network cost modelling as in the case of the modelled calculations (derived from Romania) which appear in European Regulators Group, \textit{Common Position on symmetry of fixed call termination rates and symmetry of mobile call termination rates} (Feb, 2008, Brussels), 92. Figure 18 appears below:

\begin{figure}[h]
\centering
\includegraphics[width=0.5\textwidth]{figure18.png}
\caption{Relation between market share and unit MTR costs (in certain) according to the Romanian model by ANRC}
\end{figure}
In the above example, cooperation on price may be possible if the market shares are significantly asymmetrical provided that the operators in question have market shares above 30-35%. That will tend to limit the collusion to two operators, however. If all three MNOs in the present Italian case have market shares of 30-35%, there would be symmetry.

As Filippelli points out in the present case, the AGCOM may have overstated the importance of symmetry in the specific circumstances. She states that “evidence of asymmetry is not enough to exclude collective dominance, especially in the case of abuses – where the involved firms, by a process of repeated interaction, may in the long run find a way to overcome the obstacles to collude.”

In the present case the alleged collusion does not involve price collusion, but a joint refusal to deal. It may be concluded therefore that symmetry of market shares and cost structures would be less important where the common policy is to stand firm against allowing wholesale network access by potential MVNOs. If there is a common policy associated with refusal to grant wholesale access it is likely to be one based on common incumbency and keeping out service-based operators. As Filippelli notes, the decision of the court in this case could therefore have been different if the criteria had been subject to an analysis linked to a refusal to deal rather than collusion across all, or at least other, dimensions of competition.

Lessons from the telecommunications cases

The telecommunications cases discussed above represent the application of the general law and the approach of the courts at a particular time in the development of the concept of collective dominance. The period of the post-Airtours cases is defined by the reviews of the national regulatory authorities in response to Directive 2002/21/EC, which was modified by Directive 2009/140/EC in November 2009. In the field of telecommunications the application was reinforced by the specific criteria to be considered as set out by the Commission in Annex II of the Framework Directive. The

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719 Filippelli (2010), 83
720 Ibid
principles in Airtours were regarded as providing some rigour and structure for market analysis. However, it is noteworthy that, in a sector in which high levels of concentration are the norm, that national regulatory authorities were prepared to conclude that that the markets were sufficiently transparent, and that the incentives for cooperative arrangements were sufficiently strong, to conclude in favour of collective dominance.

Of the nine cases referred to above, the regulatory agency concerned, whether the sector regulator or the economy-wide competition regulator, initially concluded in favour of collective dominance in eight of them. In five of the eight cases the initial decision was withdrawn after consideration by the European Commission or by a national administrative appeals tribunal. In the ninth case, there was an appeal to a national court against the decision of the competition authority to discontinue its enquiry and not to conclude in favour of collective dominance. In all of the cases it would appear that the regulatory or competition authority concerned had collected a significant amount of information giving at least some support to a conclusion of collective dominance.

It might be concluded that withdrawal or discontinuation of six out of nine cases, in the circumstances where some significant resource had been expended in collecting evidence, is a high number, suggesting a preference for Type 2 errors (failure to address cases of collective dominance) rather than Type 1 errors (incorrectly concluding in favour of collective dominance) at both the agency level and the appellate level. Further, the required rigour and high evidentiary standard suggested by the Airtours decision, in which the court undertook its own detailed assessment of the evidence and provided the European Commission with a very detailed guidance on how evidence was to be considered and weighed, may have had the effect of adding substantial caution to the proceedings of the national regulatory and competition authorities involved.

In addition, in the three cases in which collective dominance was upheld, the decisions were time-bound, requiring periodic review in the light of changing industry circumstances in two of the cases, \(^{722}\) and being for a limited period from the outset in the third case. \(^{723}\)

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\(^{722}\) In the case of the MACO markets in Spain (CNMC Spain (Comisión Nacional de los Mercados y la Competencia), ES/2005/0350) and Malta (Malta Communications Authority, Wholesale Access and Call

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The tendency of the agencies to adopt a proforma list of potentially relevant criteria is also apparent. This is not surprising given the list of fourteen potentially relevant criteria that were included in Annex II of the Framework Directive. Failure to consider these criteria in a systematic way might lead to complications at the administrative (European Commission or national appellate tribunal) or judicial appeals level. Under these circumstances it is not surprising in any of the cases that the agency concerned failed to develop a compelling narrative that could explain why and how cooperative arrangements might develop and continue to operate. Nor is it surprising that in the process of carrying out its required analysis, the Italian court emphasised symmetries in a proforma manner, when the real issue was not collusion on price but a possible collective refusal to deal with MVNOs and to provide them wholesale network access.

In conclusion, if the judicial approach to collective dominance, as now developed through the case law, is unable to demonstrate with any confidence and certainty the existence of collective dominance in one of the most concentrated sectors of the economy, then the capacity of that approach to apply to other less concentrated sectors of the economy is unlikely to be any better.

One practical consequence is a heightened level of agency caution resulting in a bias towards finding against the existence of collective dominance except in the clearest and most egregious circumstances. Such an outcome might please those who believe in the ability of markets to self-correct for failure over time, and who advocate against regulation as a means to address market failure. The cases suggest that, in the telecommunications sector, the oligopoly problem can only be addressed in the clearest cases, and that no bright line results from the use of analytical tools currently endorsed by the courts.

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Chapter 8: Residual issues and problems, and moving to new solutions

Introduction

A number of issues and problems remain for oligopoly regulation, and they are not well addressed by the approaches developed for collective dominance by the courts to date.

Two issues in particular will be discussed in this chapter. The first is the misalignment of the approaches to dominance that result from ex-ante regulation, including merger administration, and ex post application of competition law to behaviour. The second is the increasingly artificial attribution of intention to firms that are held to be collectively dominant.

In addition, the adoption of new solutions that emphasise the importance of effects and the economic outcomes has proceeded. These approaches have their origins in a group of cases, including Gencor\(^\text{724}\), Airtours\(^\text{725}\), and Sony\(^\text{726}\), and suggest an alternative approach to meeting the now-mainstream Airtours criteria for oligopoly regulation via collective dominance.

More recently BEREC\(^\text{727}\) has proposed an approach to oligopoly regulation in the telecommunications sector that might be applied where there are concerns about non-competitive outcomes, but where collective dominance cannot be demonstrated using the criteria in Airtours.\(^\text{728}\) The BEREC approach and its initial reception by industry stakeholders in Europe are also examined.

Differences in ex-ante and ex post approaches to collective dominance and, in particular, to intention

Regulation, such as that by sector regulators, is essentially ex-ante. Regulators intervene in advance of any specific anti-competitive behaviour to address anticipated market failure and to make structural changes that reduce the risk of abuse of dominance. In these circumstances, regulators are forecasting the effects that market

\(^{724}\) Gencor Ltd v Commission [1999] 4 C.M.L.R. 971
\(^{725}\) Airtours plc v Commission of the European Communities [2002] E.C.R. II 2505
\(^{727}\) Body of European Regulators of Electronic Communications
structure will have on the behaviour of firms in a position of substantial power in the market, including on the behaviour of firms who are held to be collectively dominant.

Regulators who are concluding in favour of collective dominance are essentially saying that the structure of the market, including the relationship of the larger firms within the market, is such that there is a material risk that those firms will coordinate and cooperate in the market rather than compete in an effective way. The risk is managed and reduced through modifications on the market structure imposed by the regulator. Therefore, for example, the regulator might require that the operators allow wholesale access to their network services and facilities on fair and reasonable terms, including cost-based prices. Or, as another example, the regulator might require accounts to be presented in a certain way to ensure that any attempts to leverage power from one market to another, through cross-subsidisation of the cost of services in competitive markets by revenues from services in monopolistic or non-competitive markets, are exposed, enabling further regulatory intervention.

Ex-ante regulation involves a forecast about the relationship between market structure and future market behaviour, and about the likelihood that the structure will facilitate and lead to collusive behaviour. In discussing such a forecast it is inappropriate for the firms involved to argue that they have no intention to substitute cooperation for competition, or to engage in a course of parallel conduct with competitors. The forecast is not based on present intentions of competitors and does not anticipate any particular actual intention in the future. The forecast is about whether, through the actions of the firms involved, certain non-competitive outcomes will likely result from the structure of the market (as characterised by the regulator).

If such a forecast is to be challenged, it must be in its own terms. That is, the factors that are identified and weighted as relevant to the characterisation of structure must be re-examined and possible new factors, overlooked in the original assessment and forecast, might be identified and taken into account. This is exactly what the Court of First Instance did in response to the Commission’s assessment of merger outcomes in Airtours.729

In the author’s view, regulators and the courts, when considering forecasts associated with ex-ante regulation and merger administration, have adopted a particular view of

intentionality and of participants’ consciousness for the purposes of potential cooperation in the market. The view is entirely objective. It is about what one would reasonably expect a firm to do in the circumstances, taking account of what such a firm might be able to know, see or find out about the marketplace and the actions of rival firms. It is a forecast of what might reasonably be expected to happen if a market remains unregulated in some respect or if a proposed merger were to go ahead.

This approach is in contrast with the possibilities that arise in considering whether there has been anti-competitive behaviour in the form of abuse of dominance. The assessment in these cases will necessarily be ex post, and evidence of actual behaviour will be under scrutiny. In response, if the firms accused of being collectively dominant are not individually dominant or have a position of unilateral dominance, they will likely seek to characterise their behaviour as unilateral rather than cooperative, and may seek to provide evidence of intent that contradicts inferences that support a conclusion of cooperation. In such cases the intention of the firm involved is not irrelevant if it throws light on the behaviour and assists in explaining it.

A number of cases show the way in which intention and “knowing” is treated in ex post competition situations.

_Dyestuffs_730

In _Dyestuffs_ the Commission held that three general but relatively uniform price increases in 1964, 1965 and 1967 by a large number of dyestuff providers across a number of countries in the EU amounted to concerted action of the kind prohibited in Article 85 (now 101) of the Treaty.731 ICI, a major producer, appealed the decision on a range of grounds, an important one being that “the existence of a concerted practice under Article 85 of the Treaty necessarily meant the existence of a common will” and of “a plan worked out in common”.732 The appellant argued that “for a concerted practice to exist it is not enough that undertakings operating in an oligopolistic market consciously adopt a parallel attitude.”733

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730 [Case 48/69] *Imperial Chemical Industries Ltd v Commission* [1972] ECR 619 (Dyestuffs)
731 Ibid, 648 The uniform increase was 125% in 1964 for aniline-based dyes, 10% in 1965 for dyes and pigments, and 8% in Germany and Benelux, and 12% in France, in 1967.
732 Ibid, 642
733 Ibid, 638
In this case some of the firms involved took the initiative to announce publically that they were intending to increase prices from certain dates in 1964, 1965 and 1967. ICI argued that “the mere fact that a manufacturer informs his competitors that he has in principle decided to make an increase cannot constitute an adequate reason for accusing him of having taken part in a concerted practice.”

The Court held that the concept of “concerted practice” in Article 85 was intended to cover and prohibit “a form of coordination between undertakings which, without having reached the stage where an agreement properly so-called has been concluded, knowingly substitutes practical cooperation between them for the risks of competition.” The importance of this in relation to intent is that the Court requires that the behaviour be such that the cooperation should be “knowing” (that is, done knowingly), and the move away from competition should also be “knowing”. This appears to be a strong and specific requirement that the firms involved should have clear intent – that is, that they know what they are doing and intend the result. The relationship of the intent required for a concerted practice and the intent required for conscious parallel conduct is not considered in this case.

The court then proceeds to articulate a very important proposition:

Although parallel behaviour may not by itself be identified with a concerted practice, it may however amount to strong evidence of such a practice if it leads to conditions of competition which do not correspond to the normal conditions of the market, having regard to the nature of the products, the size and number of the undertakings, and the volume of the said market.

Clearly the Court did not consider that the announcement of general price increases followed by implementation involving over 15 major dyestuff producers within a very short time on three occasions corresponded to “the normal conditions of the market”, notwithstanding ICI’s attempt to argue just that, with the argument that producers were taking individual decisions to follow the price leadership of different firms in different national markets for dyestuffs. The Court did not find this plausible in the least,

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734 Ibid
735 Ibid, 655
736 Ibid
737 Ibid, 654 [57-9]
stating that “it is hardly conceivable that the same action could be taken spontaneously at the same time, on the same national markets and for the same range of products.”

The Court concluded that the behaviour in question was concerted, and that this conclusion required the intentional cooperation of the firms involved. Actual intention or knowing participation is the standard in this case. However, actual intention may be deduced from the circumstances of the case and the nature of the behaviour, as in this case. It was inconceivable that the behaviour in question could be adequately explained as spontaneous, or as parallelism playing out on a large scale.

Announcement of increases in advance, when taken in context, was a critical factor confirming the Court in its view. ICI argued that, taken alone, such announcements cannot change the nature of parallelism and transform it into a concerted practice. However these factors are not to be taken alone, but, rather, in the full circumstances and context of the case. The Court concluded that the announcements were important in giving the price leaders reassurance that their proposed increases would be generally followed, and that they would not be disadvantaged by being undercut on price in the market. The announcements in 1967 enabled one of the firms, ACNA, to respond that it was refusing to increase its prices in Italy, but that it was going to increase by the general amount in two other markets, albeit later than the price leader. This response and similar statements from other producers were taken by the Court to be important confirmation that the price leaders – those making the initial announcements – and the remaining producers could proceed with the planned price increases without fear of being undercut in selected markets.

The Court upheld the appeal.

**Italian Flat Glass**

In Italian Flat Glass the Court of First Instance considered an appeal by three Italian flat glass producers against a decision of the Commission to fine them for abuse of a collectively dominant position. The Commission had concluded that the three producers controlled 79% of the Italian household market for flat glass and 95% of the automotive

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738 Ibid, 659 [109]
739 Ibid, 638
740 Ibid, 659-60
The Commission also concluded that the producers had participated in concerted practices, contrary to Article 85(1) of the Treaty, in announcing and implementing price increases at the same time, applying the same discount rates, and using the same categorisation of customers for the purposes of applying prices and discounts. In addition, the Commission concluded that the producers had made purchases of products amongst themselves, and held that “such exchanges cancel out the advantage of specialization and artificially place all of the producers on an equal footing, thus preventing customers from benefiting economically from the production and commercial edge enjoyed by individual producers.” The producers contested the accuracy, adequacy and the characterisation of the evidence.

In a detailed review of the available evidence and other documentation on which the Commission claimed to rely, the Court found that the market share evidence was ambiguous and that the issue must remain unresolved. The Court concluded that price announcements for two out of the three producers were nearly always coincident, but only for part of the period investigated by the Commission. The Court also concluded that only some discounts granted by the three producers coincided, and that this was insufficient to prove “systematic concerted action” among them.

The Court preferred the explanation of the extent of price coincidence to individual customers offered by the producers. Wholesale and other large customers preferred not to rely on one producer, but, instead, chose a preferred producer and organised the other producers as secondary. The prices offered by the preferred producer quickly became the prices for the others, a matter secured by the countervailing buying power of the customer concerned. The evidence did not support a practice of product exchange over the period being investigated by the Commission, anywhere nearly as systematic as that claimed by the Commission. The documentary evidence was simply not there.

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742 Ibid, [23] and [26] respectively
743 Ibid, [17]
744 Ibid, [20]
745 Ibid, [171]
746 Ibid, [196]
747 Ibid, [200]
748 Ibid, [201]
749 Ibid, [300-3]
The Court held that the Commission’s findings of fact on these matters had not been proved to the requisite legal standard.\textsuperscript{750}

In relation to Article 86 of the Treaty, the Court notes that the Commission did not rely on a tight oligopoly approach, and that its decision was based on an analysis that found collective dominance:

“It in no way intended to apply the concept of collective dominant position to the undertakings in question solely on the ground that they form part of a tight oligopoly controlling more than 80% of the Italian market in flat glass. It applied the concept of a collective dominant position to the undertakings in question because, not only did they hold collectively a very large share of the market, they presented themselves in the market as a single entity and not as individuals.”\textsuperscript{751}

The Court held that the Commission had not substantiated that the producers held a position of collective dominance in the market. The Commission had adduced insufficient evidence that the producers have presented themselves to the market as a single entity.\textsuperscript{752}

In the event, the court held that some anti-competitive arrangements were implemented by two of the three producers, but were of far lesser import than argued by the Commission. The Court substantially reduced the fines involved against these two producers.\textsuperscript{753}

Our current interest in \textit{Italian Flat Glass} is in the Court’s approach to actual knowledge and intention of the firms involved. In part this question was sidelined by the Court’s very different characterisation of the market and behaviour than the Commission’s. The evidentiary standard was also an issue which obscured the concept of intention. The appellant producers were able to argue successfully that the market operated differently to the way in which the Commission had portrayed, and in other respects that the evidence for the Commission’s perspective was not in the record.

However the Court did not disturb some of the Commission’s conclusions in relation to two of the producers, where the evidence supported the conclusion of concerted action

\textsuperscript{750} Ibid, [313]
\textsuperscript{751} Ibid, [350]
\textsuperscript{752} Ibid, [365-6]
\textsuperscript{753} Ibid, [373-4]
for part of the period alleged and in relation to some of the behaviour alleged. In these situations the Court found that the evidence suggested arrangements were put in place by the parties, who communicated with each other.

The two producers who engaged in a concerted practice did so directly and contrary to the prohibition in Article 85(1) of the Treaty. No question arises about the nature of their intention since the behaviour was unlawful per se. The observations in relation to Article 86 are incomplete in this regard. The Article 86 assessment by the Commission failed at the outset, because the definition of the market was not supported by satisfactory analysis\textsuperscript{754} and the Commission did not “adduce the necessary proof” of collective dominance.\textsuperscript{755}

\textit{Woodpulp II}\textsuperscript{756}

In \textit{Woodpulp II} the Court examined a Commission decision in which there seemed to be strong evidence of concertation. The concerted practice in question was that forty wood pulp producers and three of their trade associations participated in a system of quarterly price announcements. The question was whether this system of announcements was an elaborate means of communicating prices between producers in advance of each quarter in order to enable them to better align their prices. The Commission argued to this effect, and, in addition, that the announcements had the effect of making the market artificially transparent. The Court rejected these arguments. It considered that the announcements were addressed to users and did not lessen each producer’s uncertainty as to the future actions that may be taken by its competitors.\textsuperscript{757}

The Court stated:

\begin{quote}
A concerted practice refers to a form of coordination between undertakings which, without having been taken to the stage where an agreement properly so-called has been concluded, knowingly substitutes for the risks of competition practical cooperation between them. The criteria of coordination and cooperation which enabled that term to be defined must be understood in the
\end{quote}

\textsuperscript{754} Ibid, [363-5] The Commission assumed two markets for some analyses and one for other analyses, as well as for the operative part of its decision.
\textsuperscript{755} Ibid, [366]
\textsuperscript{756} \textit{Ahlström Osakeyhito v Commission} [1993] E.C.R I-1307 (\textit{Woodpulp II})
\textsuperscript{757} Ibid, [59-85]
light of the concept inherent in the provisions of the Treaty relating to competition that each economic operator must determine independently the policy which he intends to adopt on the common market.” 758

Again, the term “knowingly” suggests a level of actual knowledge and related intention. The reference to “knowingly” substituting practical cooperation for the risks of competition is problematic. This could be no more than a series of parallel conscious assessments by individual undertakings that their individual best interest is in acting in a certain, possibly risk-averse, way. There need be nothing collective or joint in taking these decisions at all, notwithstanding that the decisions are all the same. One might say that they are aligned, except that this suggests that there might have been some coordinated action in achieving the alignment. One needs to distinguish between alignment by design and intention, and alignment in effect or as an outcome.

The facts of Woodpulp II suggest that there is a heavy burden in showing that action is coordinated in this way. Part of the burden is showing that there are no alternative credible explanations that are consistent with independent decision-making by the undertakings involved. On this latter point the Court stated that “… parallel conduct cannot be regarded as furnishing proof of concertation unless concertation constitutes the only plausible explanation for such conduct.” 759 The need for such default rules on concertation and related intent is because actual intention needs to be found or inferred from the evidence.

The Court went on to restate the basic proposition about the rights of undertakings to operate in a commercially sensible manner taking account of the circumstances they find themselves in, including the possible behaviour and responses of market competitors: “It is necessary to bear in mind that, although Article 85 of the Treaty prohibits any form of collusion which distorts competition, it does not deprive economic operators of the right to adapt themselves intelligently to the existing and anticipated conduct of their competitors…” 760

758 Ibid, [63]
759 Ibid, [71]
760 Ibid
The Court’s decision on the facts is far from compelling, notwithstanding its decision that “in this case, concertation is not the only plausible explanation for the parallel conduct.”

Woodpulp II is a case where the facts seem to strongly indicate a concerted set of actions by suppliers and their associations, and yet it failed to convince the Court. Some of the factors which seemed to have influenced the Court in its decision were the long-term contractual relationships and the power of customers within those arrangements to determine volumes and to negotiate further individual reductions in price, below the prices announced quarterly in advance. There was, therefore, considerable negotiating leverage remaining with buyers and substantial price competition in practice after the announcements.

Woodpulp II set a high bar for the attribution of concertation and intent to the parallel practices of suppliers in the market it was dealing with. The Court considered that any plausible alternative explanation of conscious parallel behaviour should be preferred to concluding that there was collusive behaviour or intent. In adopting this preference the Court left uncertain the criteria to be applied in determining whether is plausible. At no stage did the Court consider whether the search for actual intent or the imputation of actual intent in the absence of any other explanatory factor might not be an impossible criterion, and that the public interest might be better served by the adoption of an approach that focussed on the outcomes of the behaviour and the effects of the practices that were described in the case on competition in the market for wood pulp. In other words, the Court did not consider the appropriateness of an objective standard based on the effects of the market behaviour.

Accountability

Regulators need to be able to justify their decisions to take action under Articles 101 and 102 of the Treaty. They need to anticipate that they will be held accountable through the appeals processes. However, the circumstances in which they are held to be accountable will be quite different for decisions made under Article 101 compared to decisions made under Article 102. The objectives of Articles 101 and 102 of the Treaty need to be distinguished. Article 101 (formerly Article 85) applies to agreements, decisions and concerted practices which may affect the common market. Article 101

Ibid [126]
Ibid [13]
applies regardless of the market position of the undertakings concerned – that is, whether they hold a position of strength and dominance in the market or not. In contrast, “Article 86 [now 102] deals with the conduct of one or more economic operators consisting in the abuse of a position of economic strength which enables the operator concerned to hinder the maintenance of effective competition ...”  

Article 101 is concerned with *per se* behaviour and, therefore, intention, or what the firm(s) were aiming to achieve, is not an issue. Article 102 is, by its nature, open to justification, and that justification could be in terms of intention and purpose.

As noted earlier in this chapter, when a case arises in which the regulator may act ex-ante because of market failure, the regulator is adopting an objective standard in relation to the intention associated with forecast behaviour. Inevitably the regulator is saying that the structure of the market, as understood and characterised by the regulator, is such that it will enable one or more parties in positions of economic strength in that market to abuse such power. The regulator therefore is predicting a high and appreciable risk that abuse of a dominant position will likely follow, and is positing that risk as the justification for intervening ex-ante. It is not necessary for the regulator to show that the risk has been realised and becomes manifest after the event. Indeed, this is effectively impossible given the logic of the situation. If the regulator intervenes then the circumstances of the market will have been changed to the extent of the intervention and of the regulatory remedies imposed. If the risk is realised notwithstanding the intervention, then that would suggest that the regulatory impositions or remedies were inadequate to address the risk involved. It would not necessarily be evidence that the market analysis was correct. Alternatively, if the risk is not realised, despite the regulatory intervention, it suggests that the intervention has been effective or that there was no need to intervene in the first place. It may not be clear which of these explanations should be adopted.

When a regulator analyses a market and decides to take ex-ante action to address the risk of dominance, the decision may, as discussed earlier, be capable of review in its terms, but the regulator cannot be accountable after the event. The processes of formally intervening, or of formally declining to intervene, substantially impact the situation and change its nature. The processes that the regulator adopted may be

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764 Ibid
reviewed and considered in terms of adequacy on appeal, but they cannot be reviewed in the light of the facts of the situation as it subsequently turned out.\footnote{In addition, review on procedural grounds is also always available, as in the \textit{Case T-310/00 Sprint/WorldCom (MCI Inc v Commission, 2004)}, in which the Court of First Instance annulled a Commission decision to reject a merger on the grounds that process requirements were not satisfied.}

Another way of saying this is that an ex post analysis will neither confirm nor deny an ex-ante assessment. This is especially so in the case of intentionality. An ex-ante analysis does not require actual or inferred intent that the firms in the market are embracing a common policy as the focus of their cooperation and therefore as the proposition around which collective dominance plays out. Therefore an ex post analysis that finds evidence of actual subjective intent or the unavoidable inference of such intent from the behaviour that is under scrutiny cannot support or justify an ex-ante analysis based on an objective conception of intent.

It follows that an ex-ante regulatory decision to intervene or not intervene is not accountable because of what happens after the event. Accountability in the course of administrative appeal or judicial review for ex-ante decisions is about assessing the sufficiency of the evidence and its analysis at the time the decision was made, and whether the regulator should have approached the case differently or made further enquiries at that time.

\textbf{Is the difference in ex-ante and ex post approaches a problem?}

Telefónica, the former Spanish incumbent telecommunications operator and now global operator, had considered its price schemes to be protected from competition law (antitrust) intervention because they were subject to sector-specific regulation. However in 2007 the Commission fined Telefónica for abusing a dominant position through margin squeeze tactics. Telefónica considered that it was squeezed between two regulators – the national regulator, CMT, and the Commission, which it considered to be at odds with each other.\footnote{Telefónica Press Release IP/07/1011 of 4 July 2007, \url{http://saladaprensa.telefonica.es/documentos/070704_Press_Release_EU_decision_ing.pdf}}

The Commission response, on the same day, stated:

\begin{quote}
There is nothing extraordinary or exceptional in the fact that the Commission and the [national telecommunications regulator] found different results: in the telecommunications sector regulators put in place ex-ante regulatory...
\end{quote}
mechanisms allowing competition to develop, but can only do this on the basis of market and cost forecasts. In so doing regulators lessen, but cannot entirely eliminate the risk of anti-competitive behaviour. Competition authorities act ex post, using historical data on effectively incurred costs.”

Clearly, two different schemes of control can apply to the same situation. The Commission’s justification, cited above, for the operation of ex post and ex-ante approaches is that sector specific regulation is an ex-ante means of regulating markets, while competition law is an ex post mechanism for regulating markets. The outcomes will differ because the range of remedies that a regulator may impose ex-ante is clearly different from that imposed by competition authorities and the courts for actual breach of competition laws. The legal position in relation to the application of regulation and competition law is stated by Monti: “... provided the regulator does not compel the undertaking to act in a specific way which is in breach of Articles 81 and 82, then the undertaking remains subject to EC competition law, while if the undertaking is forced to act in ways that infringe Articles 81 and 82, then the Member State is responsible for the breach...” because the Member State is responsible for the national regulator. This approach reflects the Commission view in the Telefónica case that competition law ultimately determines any outcome and any misalignment between an ex-ante regulatory intervention and an ex post decision.

Whether or not an ex-ante approach is to be preferred depends upon whether competition law remedies are sufficient to redress market failure. Where extensive intervention is needed to redress market failure, such as a requirement for frequent intervention, then ex-ante regulation might well be more appropriate than relying on ex post approaches of competition law.

By allocating appropriate spheres to ex-ante and ex post approaches, to regulation and competition law, the Commission and commentators have been able to minimise the opportunities for problems to arise. To note that “competition policy tells firms what

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767 MEMO/07/274 Antitrust: Commission decision against Telefónica – frequently asked questions 4 July 2007
768 Monti, op. cit., 138-9
770 This was the position adopted also in Deutsche Telekom AG, OJ 2003, L263/9; upheld by the Court of First Instance in Case t-271/03 Deutsche Telekom AG v Commission, (judgment of 10 April 2008)
771 Buigues, P A, ‘The competition policy approach’ in Buigues, P A and P Rey (Ed), The Economics of Antitrust and Regulation in Telecommunications: Perspectives for the new European Regulatory Framework (Edward Elgar, 2004), 17
not to do” and that “regulation involves telling them what they are to do”\textsuperscript{772} is to allocate general spheres in which each approach is most useful. Although the comment might have some general utility, it is not accurate in many situations: regulation may well involve prohibitions and conditional instructions about what must be done.

If this allocation of spheres of useful regulation to each approach is the appropriate way forward, and if, as earlier discussed, the ex-ante approach is not accountable in terms of ex post review, then the different approaches to intention – what I have labelled as “objective” in the case of ex-ante intervention, as opposed to “subjective” in the case of ex post intervention\textsuperscript{773} – then there is unlikely to be a clash of approaches and therefore unlikely to be a problem in practice.

This view is confirmed by commentators such as Filippelli, who notes, in relation to Article 102, that “by an economic-based assessment of evidence, authorities can infer elements of cooperation, supporting the inference of collusion. In this case, evidence of faulty or intentional conduct allows authorities to fully enforce art. 102, by imposing injunctions, possibly remedies, and fines.”\textsuperscript{774} However, while Filippelli notes that Article 102 can be fully enforced with evidence of intentional conduct, she also makes the contrary point that the lack of evidence of cooperation does not exclude anti-trust intervention: “When the basic art. 102 requirements are met – joint market power\textsuperscript{775}, conduct, and anti-competitive effects – thanks to the objective notion of abuse, the Commission can deduce art. 102 violations and impose both injunctive orders and, when necessary, remedies, on involved companies.”\textsuperscript{776} This approach involves “attacking anticompetitive effects not supported by full/sufficient evidence of a meeting of minds.”\textsuperscript{777}

**Avoiding collective dominance altogether**

Following on from the above analysis, there would seem to be two approaches available to courts in the application of Article 102 to circumstances where actual behaviour is

\textsuperscript{772} Ergas, H (2002), ‘Regulation and essential facilities: some key issues’, the Network Economics Consulting Group, Rome, as cited in Buigues and Rey, ibid, 25.
\textsuperscript{773} See earlier in this chapter, after Footnote 728 and following.
\textsuperscript{775} It is assumed that a conclusion of joint market power in this situation would be derived from an analysis of the oligopoly structure of the market or from an ex-ante analysis of market structure supporting collective dominance.
\textsuperscript{776} Filippelli (2013), 239
\textsuperscript{777} Ibid
alleged to constitute an abuse of dominance or to have an anti-competitive effect. The first approach is via the collective dominance route following Gencor and Airtours, in which collective dominance might be determined from the structure of the market in question and from reasonable inferences that might be drawn about the relationship and common purposes and policies of the participants in that market, and then a separate examination to determine whether there has been abuse of that collective dominant position. The second approach is to determine from the nature of the market and from the performance outcomes that are evident in the market that there has been a violation of Article 102, without enquiring into the intentions, actual or implied, of the participants.

The question to be considered is whether both approaches are available in both the ex post application of competition law and the ex-ante intervention of sectoral regulators.

**Ex post intervention and the possibility of “objective” or “effects” tests**

As indicated above, some of the case law indicates that intentionality and a common purpose and cooperation should only be attributed to the participants in a market who are adopting parallel approaches in their market behaviour when no other explanation is available. The high point of this approach was in *Woodpulp II* when the Court found that the announcement of wholesale prices for wood pulp on a quarterly basis could be explained in terms of the market structure, traditional industry norms and the expectations of large and powerful buyers without resorting to explanations based on cooperation. However, such an approach may well leave intact the fundamental concern about non-competitive oligopoly markets, namely prices that in the longer term remain well above cost and at levels that would not otherwise be expected in an effectively competitive market. In *Woodpulp II* there was evidence of countervailing strength by paper manufacturers and other wood pulp buyers, and of the negotiating options available to such customers under typical supply contracts. In addition, there was no evidence that wholesale prices remained above competitive levels in the longer term. In

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779 Ibid, [126]
780 Ibid [13]: The Court noted that pulp producers commonly concluded long-term supply agreements of up to five years with their customers under which the producers guaranteed a minimum quantity of product would be available at the announced price, but which left the customer free to purchase more or less of the product and to negotiate the price paid.
reviewing the price history of wholesale wood pulp during the 1970s and early 1980s, the Court concluded that prices rose and fell in accordance with overall demand for paper.\textsuperscript{781} In addition, there were factors that were inconsistent with cooperation or concertation.\textsuperscript{782} So in this case there were no effects of concern and no fundamental continuing problem. In this case the Court considered the effects and looked for the evidence of prices being maintained, but it was not there.

**Merger case law and intentionality**

In contrast with this are cases involving ex-ante intervention, particularly in the case of merger administration.

The Court may examine the possibility that the proposed merger might result in a changed market structure that is conducive to collective dominance arising in the first place or of existing collective dominance being strengthened. Three cases, discussed below, suggest that alternative approaches exist that may be available to the court, rather than a single approach based on the three criteria test for collective dominance set out in *Airtours*.\textsuperscript{783}

**Gencor\textsuperscript{784} and tight oligopoly**

This case involved the merger of the platinum and rhodium assets of Gencor and Lonrho to form a powerful provider of these precious metals on international markets, including the European market. The court considered whether the merged entity might find the resulting market structure conducive to a cooperative approach with the largest of the remaining producers. Of importance for present purposes, however, is the court’s view of the possibility of alternative approaches to showing collective abuse of a dominant position under Article 102.

The court accepted the traditional view that structural or economic links between the parties might be adduced as evidence to support a forecast of the likelihood that the

\textsuperscript{781} Ibid, [106]-[114]
\textsuperscript{782} Ibid, [115-6]: Parties outside the plaintiff group of 40 producers alleged to be in a cooperative arrangement, accounted for 40% of the total consumption of wood pulp in the Community. “In view of the size of that market share, it would have been difficult for a cartel to operate only as between the undertakings found to have committed an infringement by engaging in concertation.” In addition there were shifts in market share over the relevant period, between 1975 and 1981: [119]
\textsuperscript{783} *Airtours plc v Commission of the European Communities* [2002] E.C.R. II 2505
\textsuperscript{784} *Gencor Ltd v Commission* [1999] 4 C.M.L.R. 971
market structure will lead to or strengthen a position of collective dominance. However it went further and extended the notion of economic linkage to include circumstances that would lead to anticipatory (or parallel) conduct in a tight oligopoly:

... 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.\(^{785}\)

In neither circumstance cited by the court in *Gencor* would it be appropriate to require proof of actual intention to operate cooperatively or a case for strong inference of such an intention. Merger cases are prospective in orientation, based on the comparison of the likely outcome with the proposed merger compared to the likely outcome in the absence of the proposed merger. *Gencor* permits specific economic links to be proven, with the implication that they would be powerful enough to induce a cooperative approach by the linked parties in the way they address the market.

*Gencor* also permits another path, namely, to rely on the tight oligopoly to do the work of linking the parties, provided the market is generally conducive to collective dominance. Such characteristics include product homogeneity,\(^ {786}\) the reaction of potentially interested third parties,\(^ {787}\) technological maturity,\(^ {788}\) and past oligopolistic tendencies.\(^ {789}\) The court in *Gencor* appears to be saying, if there are specific economic links to sustain a collective approach to the market, a conclusion of collective dominance might be justified; but, alternatively, if the oligopoly is tight and other features have been associated with collective dominance in the past, then collective dominance might be assumed in the present case as well.

\(^{785}\) Ibid, 1065 [276]
\(^{786}\) Ibid
\(^{787}\) Ibid, 1067 [289]
\(^{788}\) Ibid, 1067 [285-8]
\(^{789}\) Ibid, 1068 [293-6]
**Airtours** 790 and objective analysis

The Court of First Instance in *Airtours* noted that “where the Commission takes the view that a merger should be prohibited because it will create a situation of collective dominance, it is incumbent upon it to produce convincing evidence thereof”. 791 In the absence of a clear standard associated with “convincing evidence” it appeared that a duty was being placed on the Commission “to demonstrate in detail the reason why collusion appeared very likely in the post-merger scenario,” 792 suggesting a new and higher threshold. With a higher evidentiary threshold there was a greater likelihood of false negatives – that is, that mergers that should have been prohibited under Article 102 would in fact escape and proceed to fulfilment. In turn this raised the issue of whether collective dominance was a useful device on which to base merger control under these changed circumstances.

In the event the Council of the European Union adopted an objective test to be applied in future to merger control. The test is the SIEC (Significant Impediment to Effective Competition) test in the 2004 Merger Regulation. 793 As Filippelli notes, “dominance would represent a mere example, although probably the most frequent, of the anticompetitive effects the new Regulation intended to address.” 794

In *Airtours* the Court required an economic analysis of the market and of those elements of market structure that are believed to be conducive to collective dominance and, ultimately, provide a basis on how it might be abused. The Court examined a range of economic characteristics of the market that might facilitate collective dominance, including the volatility of historic market shares, 795 past and anticipated development of demand (demand growth), 796 demand volatility, 797 market transparency, 798 the ability of smaller tour operators to augment capacity, 799 small tour operators’ access to airline

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790 *Airtours plc v Commission of the European Communities* [2002] E.C.R. II 2505
791 Ibid, [63]
794 Ibid, 125
796 Ibid, [123-33]
797 Ibid, [134-47]
798 Ibid, [148-81]
799 Ibid, [217-28]
access of small operators to distribution, and the possible reaction of consumers. These are objective considerations not related to the intentions of the merging entities. The Commission subsequently included them in the 2004 Horizontal Merger Guidelines which focused on the economic analysis of all market factors that might be relevant to the outcome of the merger.

In sectors subject to ex-ante regulation, such as telecommunications, the post-Airtours reviews by the national regulatory authorities (NRAs) suggested that the high threshold established by Airtours made it difficult in most cases for the NRAs to conclude in the first place, or to sustain under European Commission and national review, in favour of the existence of collective dominance. This is shown by the review of relevant cases in Chapter 7.

**Indirect evidence – Impala**

The Impala case involved an appeal by the plaintiff association against the decision of the Commission to allow two music distributors, Sony and Bertelsmann, to merge their recorded music businesses. The Court of First Instance overturned the decision, and, in the course of doing so, made some important comments about the alternative approaches that might be taken to a conclusion of collective dominance. The comments were *obiter* because they related to matters that were not argued between the parties and therefore did not form part of the Court’s reasons for decision.

The Court observed:

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....in the context of the assessment of the existence of a collective dominant position, although the three conditions defined by the Court of First Instance in Airtours v Commission, ... which were inferred from a theoretical analysis of the concept of a collective dominant position, are indeed also necessary, they may, however, in the appropriate circumstances, be established indirectly on the basis of what may be a very mixed series of indicia and items of evidence
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800 Ibid, [229-51]
801 Ibid, [252-61]
802 Ibid, [270-6]
803 European Union, Guidelines on the assessment of horizontal mergers under the Council Regulation in the control of concentrations between undertakings (Horizontal Mergers Guidelines), [2004] OJ C-31/5–18
805 Ibid, II-2385 [254]
relating to the signs, manifestations and phenomena inherent in the presence of a collective dominant position.\textsuperscript{806}

The Court went on to clarify exactly what this could mean in the circumstances of a case:

Thus, in particular, close alignment of prices over a long period, especially if they are above a competitive level, together with other factors typical of a collective dominant position, might, in the absence of an alternative reasonable explanation, suffice to demonstrate the existence of a collective dominant position, even where there is no firm direct evidence of strong market transparency, as such transparency may be presumed in such circumstances.\textsuperscript{807}

This approach appears to be quite different from the primary approach adopted in \textit{Airtours}. In \textit{Airtours} the approach is to build up a picture based on the level of transparency and the factors that enable transparency of a sufficiently high order in practice, then to examine retaliation mechanisms and incentives for continued participation in the cooperative behaviour, and lastly, to examine the capacity of smaller firms and prospective market entrants to thwart a continued approach to the market by the firms that are allegedly cooperating. The approach outlined in \textit{Impala} does not look for transparency in such a direct manner. Instead it seeks to find the typical shadows cast by collective dominance, such as “the alignment of prices over a long period”. In other words, if a situation has hallmarks regarded as typical of collective dominance based on experience in other cases, then we can be justified in concluding that it, too, is a case where the market is sufficiently transparent to have allowed tacit coordination on price.\textsuperscript{808}

This approach was accepted by the Court of Justice when an appeal by Bertelsmann AG and Sony Corporation (\textit{Sony Case}) was heard.\textsuperscript{809} The Court of Justice in \textit{Sony} sought to present the different approaches as two parts of a total approach. Apart from testing for transparency, retaliatory/incentive mechanism and the potential disruptive capabilities of new entrants and smaller market participants, a court (or the Commission) should test other factors against the hypothesis of tacit collusion. The Court noted:

\textsuperscript{806} Ibid, II-2384 [251]
\textsuperscript{807} Ibid, II-2384 [252]
\textsuperscript{808} Ibid, [253]
In applying those criteria [the three Airtours conditions], it is necessary to avoid a mechanical approach involving the separate verification of each of those criteria taken in isolation, while taking no account of the overall economic mechanism of a hypothetical tacit coordination. ... the assessment of, for example, the transparency of a particular market should not be undertaken in an isolated and abstract manner, but should be carried out using the mechanism of a hypothetical tacit collusion as a basis. 810

Clearly a more holistic approach may avoid some of the consequences of considering criteria in isolation. However, there are many potential pitfalls with the alternative approach, especially if it is the only route to showing sufficient transparency in a case. For example, the evidence of parallel behaviour (price parallelism over a period) becomes the evidence for transparency and therefore the important plank supporting collective dominance. The same evidence at that point, once collective dominance is established, becomes the evidence of abuse of such dominance. This might be considered to be too easy a path to such a finding.

Another problem is that it is not apparent what weight should be given to the parallel pricing compared to other factors that might suggest that transparency was actually limited because of, for example, the localised approach to certain discounts that obscured the level and movement of paid prices (as was the case argued by the Commission and the merging companies in Impala). 811

It is unclear whether the burden of proof in relation to collective dominance that was put in place in Airtours would be raised or lowered by the Impala developments. 812 It could be argued that it is lowered, to the extent that the Commission may now rely on indirect evidence to establish collective dominance. One the other hand, there is some suggestion in Impala that a more holistic assessment should be undertaken on all occasions, potentially increasing the burden of proof. As already noted, the comments in Impala in this regard were obiter. The comments are therefore waiting to be tested in this respect in a suitable case.

810 Sony, ibid, [125-6]
812 As noted in Filippelli, M, Collective Dominance and Collusion: Parallelism in EU and US Competition Law (Edgar Elgar, London, 2013), 137-8: “… even if there is no firm evidence of the Airtours conditions, competition authorities may as well infer collective dominance, if such a deduction appears consistent with the functioning of the market involved.” [138]
A No Fault Solution

The approach in Airtours and further development of the indirect approach to establishing Airtours criteria, especially in relation to market transparency, have encouraged academic thinking towards a “no-fault” approach to the questions posed by oligopolistic behaviour and parallelism in particular, and by the notion of collective dominance. It is useful to concentrate here on the work of Marilena Filippelli and her 2013 analysis.813

The term “no-fault conduct” was used by Filippelli,814 and reflects an objective approach that does not rely on the direct evidence or inference of intention. It aligns well with economic analysis that is concerned with outcomes, and not with intent.815

Filippelli noted that the relationship between oligopolistic interdependence and tacit collusion is quite complex and not deterministic.816 In oligopolistic markets firms may behave in ways that reflect independent decision-making, but the behaviour that results may seem to be cooperative. The outcomes might be similar for a number of firms, each paralleling the other. There can be robust competition within oligopolistic markets as the few firms involved seek to pursue the advantages they consider they have and to achieve the market results that they want, despite competitors. Or there can be a stand-off as firms adopt holding positions and monitor their competitors. No single outcome is determined by the nature of the market, and the outcome may change over time.

Filippelli noted that “[a]lthough the mechanism of tacit collusion is typical of oligopoly; it is however in oligopolistic markets that the strongest competition and the highest rate of innovation can often be found”.817 Oligopoly is compatible, therefore, with both competition and collusion.

Filippelli proposed a new approach to determining whether there is tacit collusion for the purposes of ex post application of competition law, taking tacit collusion as the anti-

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813 Ibid: Referred to below as Filippelli (2013)
814 Ibid, 225
815 Ibid: “Absent proof of negligent or intentional action, the Commission cannot impose any fine, as this kind of measure requires proof of subjective elements (intentional or negligent conduct) but may impose injunctions and remedies.”
816 Ibid, 196
817 Ibid, 197
competitive but not inevitable outcome of oligopolistic interdependence.\textsuperscript{818} She considered that there are three conditions that need to be fulfilled for her approach to apply; namely, that the market is prone to collusion;\textsuperscript{819} that there should be internal stability to sustain collusion;\textsuperscript{820} and there should be external stability of collusion.\textsuperscript{821}

In relation to the first condition, the proneness of the market to collusion, Filippelli notes that it is crucial to analyse past company behaviour.\textsuperscript{822} Past collusion might be deduced “from stable parallelism or fluctuations from supra-competitive to competitive price”.\textsuperscript{823} The argument is that if a market has shown clear signs of collusion in the past, and if there has been no structural change, then it may well be collusive at present and into the future: “….in the case of abuses, that dynamic may persist and continue affecting companies’ behaviour…”.\textsuperscript{824} Other factors associated with the structure of the market are also relevant to the analysis including barriers to entry, product homogeneity, and low demand elasticity.\textsuperscript{825}

Filippelli’s second condition for collective dominance was whether the internal market characteristics will support internal stability of collusion. The emphasis was on stability and continuity of the support for collusion, but fitting the specific kind of parallelism at issue.\textsuperscript{826} Filippelli noted that “[a]s a general rule, firms are willing to go on colluding insofar as collusion is expected to ensure higher profits than defection – that is, to return to competition.”\textsuperscript{827}

There may be specific retaliatory mechanisms, but a move or return to competitive conditions will often be enough. Filippelli noted that actual past retaliation is not required:

Proof of punitive mechanisms rests on evidence that firms could effectively react to defections by retaliating, whereas proof that retaliation has occurred is not needed. Indeed, lack of actual retaliation represents the strongest evidence of effective punitive mechanism: retaliation is extremely effective when it exerts

\textsuperscript{818} Ibid, 195
\textsuperscript{819} Ibid, 199-201
\textsuperscript{820} Ibid, 201-6
\textsuperscript{821} Ibid, 206
\textsuperscript{822} Ibid, 200
\textsuperscript{823} Ibid
\textsuperscript{824} Ibid
\textsuperscript{825} Ibid, 201
\textsuperscript{826} Ibid
\textsuperscript{827} Ibid, 202
such a strong deterrence to impede defections and, therefore, when used it is no longer necessary to implement any retaliation. Therefore, the analysis of retaliation should focus on the mere plausibility of punishing defection, rather than on actual punishment.\footnote{Ibid, 202-3}

There is a problem with this analysis associated with drawing conclusions from the absence of manifestations of any kind. The lack of actual punishment in the past may well be evidence of the strong deterrent threat of the retaliatory mechanism. Equally, it could be evidence of the lack of collusion in the first place, or of any behaviour that is not the result of independent decision-making of the individual firms. Both the retaliatory mechanism and the collusion may be imagined by the observer who convinces himself of the potential for the market structure to facilitate collusion. On the other hand, if deterrents are perceived as very potent, as in the case of the nuclear deterrent to date, they may encourage continuing collusion (or in the case that Filippelli is considering, continued parallel behaviour).

Filippelli used cases involving refusal to deal as examples of punishment for defection that is unlikely to have a history of use, for the obvious reason that once one of the incumbent entities deals with new entrants the situation is entirely changed and cannot recur. The arrangements might be stable, but are totally disrupted when one party decides to deal. In the Tele2/TIM case\footnote{Autorità Garante della Concorrenza e del Mercato, Tekle2/TIM, Vodafone, Wind (2004), already referred to in Chapter 7} in 2004 the Italian Competition Authority investigated the refusal of three mobile network operators to permit access to their respective networks by potential MVNOs. Filippelli noted that “the permanence of collusion depended on the joint refusal to deal, so that even a single defection would have destroyed collusion in a definitive way. …the knowledge that defection would have disrupted collusion and implied a change in the joint strategy of all the firms involved was, in all probability, the determinative factor strengthening collusion from within.”\footnote{Filippelli (2013), 205}

In such a case it was not the threat of retaliation that underlined the collusion (joint refusal to deal) but the internal assessment of the benefits received (in the form of higher profits) from the continuation of the parallel behaviour.

The third of the conditions specified by Filippelli is external stability of collusion. This might take the form of external countervailing forces or the competitive constraints that
other smaller or potential competitors might impose. Filippelli made the interesting point that “by demonstrating ... that the companies concerned hold market power and realize anti-competitive effects, competition authorities indirectly demonstrate the absence of external pressures undermining collusion.”831  Essentially, if there were external constraints the behaviour in question would not have occurred, or would have taken a weaker form. The third condition is more of a formal statement than an actual condition that needs testing in the course of ex post competition law intervention.

The three conditions nominated by Filippelli are in effect versions of the Airtours criteria that have been amended for application in ex post competition law circumstances.

The first of Filippelli’s conditions enables the fact of parallel conduct over a long period, especially in relation to price, to be taken as evidence that transparency sufficient for tacit collusion must have also been present if the total circumstances of the market, when analysed, are consistent with treating the conduct in that manner. In other words, if there are no other plausible explanations.

The second of Filippelli’s conditions, relating to the internal stability of the market for collusion and the various incentives for continued collusion and deterrence for non-compliance with a common policy, have direct equivalence to the second condition in Airtours which also relates to incentives and retaliatory mechanisms.

The third of Filippelli’s conditions, relating to the external stability for collusion, has direct equivalence with the third condition in Airtours, which relates to the prospects for disruption of the collusive arrangements by other firms that are not part of the collusive arrangement or who might be attracted to enter the market by the supra-competitive prices that prevail as a result of the collusion.

In fact the only real variation in Filippelli’s approach for ex post application of competition law, compared to the approach in Airtours for ex-ante merger administration (and other ex-ante applications in relation to sector regulation) is in relation to the first condition. Looking forward from an ex-ante perspective the Commission or a court must examine whether the structure of the market in question, and its operating norms, afford a sufficiently high level of transparency to be the foundation for the development of cooperation and subsequent compliance monitoring necessary for collective dominance in oligopolistic market circumstances. Looking back

831 Ibid, 206
from an ex post perspective, with at least some behaviour evidence to consider, the
Commission or court might, on Filippelli’s view, consider whether the market has the
characteristics that suggest collective dominance and to assume, or confirm, that the
level of transparency must have been sufficient to sustain the collusion that has
occurred.

With Filippelli’s analysis the argument is quickly reduced to the basic and starting
question, “whether the observed conduct is the result of collusion or is the result of
mere oligopolistic interdependence”. The answer that she offered was whether the
market in question was one that is conducive to collective dominance, and this means
that a number of characteristics that have been associated with collective dominance in
the case law and the economic literature need to be analysed. Filippelli suggested that
the appropriate method is to apply her amended version of the Airtours conditions in
conjunction with the approach suggested in Sony:

... by adopting the substantive test suggested above (the Airtours conditions
revisited and amended) and the Sony method (comparing the hypothetical
collusion expected to arise in the market at issue with the characteristics of the
parallelism observed), competition authorities may verify whether pure
parallelism embodies, in all probability, an abuse of collective dominance.

Whichever way the method is described, it depends on an assessment of factors that are
quite often ambiguous for collective dominance, either intrinsically or because their
importance is heavily situation-dependent.

Many of the criteria listed in Annex II of the Framework Directive to be used by
national regulatory authorities in making an assessment of joint dominance in electronic
communications markets in accordance with Article 14(2) are ambiguous in one of these
senses. For example, the requirement for a “mature market” admits of various degrees
and kinds of maturity. Maturity usually means that demand has been largely fulfilled or
saturated and annual demand growth has subsided to reflect underlying organic growth
such as in population. In this environment there is always pressure on competitors to be
innovative in reducing costs or in new service design and adaptation. Market maturity
might lead to greater competition and not necessarily to collusion.

Ibid, 213
Ibid
regulatory framework for electronic communications networks and services, OJ L 108/33, 50
The second Annex II criterion is “stagnant or moderate growth on the demand side”. In these circumstances competitors might reduce competition and settle for their share of the market, or they might modify and sharpen their competitive strategies to devise ways of encouraging valuable customers to switch. In the course of doing so they might devise new service characteristics that such customers might consider would add value. Stagnant or moderate growth does not necessarily entail competition that is price-based and a race to the bottom.

Another criterion in Annex II is “similar market shares”. It is assumed that substantial differences in market share would be reflected in different unit costs and therefore in different strategies to compete in the market. It is assumed that such differences would make it unlikely that competitors with dissimilar market shares would find sufficient common ground for a common policy to the market. That need not be so. In the case of telecommunications mobile networks the modular design of cellular networks means that most of the returns to scale have been achieved by market shares of around 30%. In that circumstance, a market share of 35% may not be different from a market share of 55% in terms of unit cost and profitability. However most observers would say the market shares are dissimilar simply based on the numbers involved and the second share metric being more than 50% more than the first.

Another example is the criterion concerning “absence of excess capacity”. Filippelli notes:

Evidence that companies involved in parallelism have excess of capacity and maintain such excess through time raises the suspicion of market collusion. Creating and maintaining capacity is extremely costly, so this choice would be irrational outside of a collusive scheme. Where connected to parallelism, over-capacity may be the indicator of an established mechanism of retaliation: companies are ready to react to possible defections, by increasing output and causing a drop in the market price. 835

However in networked industries, such as telecommunications and electricity, networks are built to handle daily peak demand. At other times the networks have excess capacity. It makes sense for them to encourage users to use existing capacity at off-peak times through off-peak pricing discounts. If excess capacity is inevitable given the nature

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835 Filippelli (2013), 215-6
of the industry, it is not useful in distinguishing whether the observed conduct— or parallel behaviour— “is the result of collusion or is the result of mere oligopolistic interdependence”. Alternatively, of course, the existence of substantial off-peak capacity and the step-function manner in which blocks of capacity are added, may mean that telecommunications networks are inherently conducive to oligopoly and possibly, using the analysis now being discussed, to collective dominance.

Filippelli referred to “anomalous excess of capacity”. This term suggests that there may be excess capacity that is normal in certain circumstances. Filippelli suggested, but not explicitly, that maintaining an excess of capacity “through time” might be sufficiently anomalous to “[raise] the suspicion of market collusion”. It is agreed that it would raise suspicions of this kind and warrant an examination. It is reasonable to consider why a firm might develop excess capacity over a long period of time without deploying it to meet operating demand. But Filippelli attempts to convert excess capacity into a much more definite indicator of collusion than this:

Creating and maintaining capacity is extremely costly, so this choice would be irrational outside of a collusive scheme.

This is not necessarily the case. In any situation where the available size of a building block of equipment is such that it exceeds long term demand, there is automatically a situation of long term excess capacity. As noted, this occurs in network businesses, such as telecommunications, where the carrying capacity of a tower may well exceed the longer term needs for a specific location, or where the use of the connection to most premises is well below the maximum throughput that is available, or where the processing capacity of the network is designed and built to handle peak loads, resulting in substantial under-utilisation at non-peak times. Another example would be in situations of high demand growth where demand forecasting is uncertain: in these cases the level of unused capacity, installed to take advantage of demand surges should they occur, may exceed requirements at any given time and may continue to do so over a long period of time. These examples result from the technologies and topologies of the networks, not from the individual or interdependent decisions of the firms in such industries. They are largely unavoidable, but not irrational.

836 Ibid, 213
837 Ibid, 215
838 Ibid
839 Ibid
However, there is a useful line of inquiry arising from Filippelli’s remark, cited above, and that is whether it might be “irrational” for the network operators involved to continue to live with the cost of excess capacity without trying to do something about it. In fact, competing network operators often do share essential capacity in order to reduce both their individual costs and overall industry costs associated with under-utilised capacity, and are often encouraged to do so by sectoral regulators. Even without commercial sharing, network operators have strong commercial incentives to reduce costs by encouraging consumer behaviour modification through discounted pricing for off-peak periods.

At best Filippelli’s remark applies to capacity that is capable of being stored – such as industrial inventory, whether inputs such as coal and iron ore, or outputs such as steel. But even here it may be rational to sustain excess capacity as a hedge against market demand volatility and supply chain uncertainty, rather than as part of a collusive strategy.

These examples show that the methods referred to by Filippelli have a large component of “hit and miss” in them. The criteria used may apply – or they may not. The more situation-dependent the criteria, the more analysis that needs to be undertaken to determine how the criteria work in any particular market, and the more exceptions that are generated, the less useful the summaries of past experience such as that captured in the list of criteria in Annex II, or in the decisions of the courts and the Commission. This is not a criticism of the need to undertake detailed economic analysis or of the need to develop a comprehensive understanding of the way in which markets operate in individual cases. However it does weaken the reliability, and therefore the credibility, of a method based on the application of a set of non-determinative criteria to establish whether the parallel behaviour might be the result of collusion or of mere oligopolistic interdependence.

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840 In the case of telecommunications the view of most national regulators in favour of capacity and infrastructure sharing was made plain in their concluding statement at the Global Symposium for Regulators conducted by the International telecommunication Union in 2008: “Best Practice Guidelines on innovative infrastructure sharing strategies to promote affordable access for all” https://www.itu.int/ITU-D/treg/Events/Seminars/GSR/GSR08/PDF/GSrguidelines08_E.pdf
The BEREC initiative

BEREC is the Body of European Regulators for Electronic Communications that was established by the European Parliament and Council in 2009, as part of the telecommunications reform package introduced at that time.\(^{841}\)

In 2014 BEREC commenced work on the analysis of anti-competitive outcomes in the electronic communications market and whether oligopolistic structures contributed to such outcomes. In particular BEREC sought to examine whether collective dominance was the appropriate means of controlling electronic communications markets into the future, as part of an overall review of the regulatory framework. In its questionnaire to all national regulatory authorities, BEREC noted that the market dynamics were changing “potentially leading in certain situations to an increase in oligopolistic market structures characterised by a small number of actors”,\(^ {842}\) and that, although national regulatory authorities have considerable experience in regulating markets with individual substantial market power “there are fewer precedents concerning analysis and regulation of oligopoly markets in an ex-ante context.”\(^ {843}\)

In June 2015 BEREC published its report on oligopoly analysis for public comment.\(^ {844}\) BEREC takes the view that not all oligopolies raise competition issues, and that only those that contribute to anti-competitive outcomes are of concern.\(^ {845}\) BEREC contrasts joint dominance with tight oligopolies:

> These [non- or sub-competitive market] outcomes may be the result of tacitly colluding oligopolies (joint dominance) or of tight oligopolies where coordination does not occur but the market structure is not conducive to effective competition.\(^ {846}\)

For BEREC, tight oligopolies are a form of market failure which the current European Union electronic communications regulatory framework “does not explicitly address”.\(^ {847}\)

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\(^{842}\) BEREC, ‘BEREC Report on Oligopoly analysis and regulation: Questions to stakeholders’, Document BoR (14) 172 (December 2014), 2

\(^{843}\) Ibid


\(^{845}\) Ibid, 6

\(^{846}\) Ibid

\(^{847}\) Ibid, 6
BEREC uses the term ‘effective competition’ to describe situations in which an optimal balance is reached between longer-term dynamic efficiency and shorter-term static (or productive) efficiency. BEREC notes that situations in which short term pricing leads to super-normal profits may still be compatible with effective competition if such situations lead to dynamically efficient competition in the longer term through investment in innovation and new technologies that, in turn, leads to greater welfare gains.

Because of the possibility of a balance between shorter-term static efficiency and longer-term dynamic efficiency, oligopolistic markets might deliver effective competition under certain circumstances. Some of these circumstances are instanced by BEREC, including “where innovation and investment associated with substantial risks play a major role” in the industry concerned, where competitive pressure limits the ability of firms to raise prices above a competitive level (especially competitive pressures from adjacent markets), and where there is a threat of potential entry attracted by supra-normal profits.

BEREC notes that the first of these examples, involving a major role for innovation and investment, describes many telecommunications markets, which may therefore be not only oligopolistic but also effectively competitive.

The emphasis in the BEREC proposal is not on oligopoly as such but on ineffective oligopolistic competition, where ‘[t]he equilibrium is non-cooperative and stable, as it results from each undertaking’s individual best reaction to its competitor’s behaviour’. The issue is how to identify oligopolistic markets that are likely to have ineffective competition from those that are not, on an ex-ante basis.

BEREC’s answer is that “ineffective oligopolistic competition in the absence of tacit collusion may occur when the market presents one or more of the following characteristics: (1) market concentration is high, (2) high entry barriers and no

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848 Ibid, 12
849 Ibid
850 Ibid
851 Ibid, 15
852 Ibid
853 Ibid
854 Ibid: “As telecommunications firms face manifold risks, such as uncertain demand or exogenous technological developments, an oligopolistic structure might be well suited to lead to a dynamically efficient outcome.”
855 Ibid
significant new entrants, (3) no countervailing buying power, (4) mature technologies, i.e. little incentive to innovate, (5) capacity constraints; and on the demand side: (6) low price-elasticity and low cross-price elasticity due to e.g. switching costs and (7) low growth of demand/a mature market.”

This list is the same in all except one respect to the list of structural characteristics that would make a market conducive to tacit collusion. The single exception is in relation to capacity constraints, as noted above. The existence of ongoing excess capacity has been regarded as an indicator of a collusive market structure, since the excess capacity would be needed to cater for the additional demand resulting from retaliation for cheating. Its existence would signal that retaliation could be effective.

One might be tempted to conclude that, on BEREC’s view, the difference between an oligopolistic market conducive to tacit collusion and one that may lead to non-cooperative ineffective competition is the existence of excess capacity over a period in the first case, but not in the second. For example, Richard Feasey comes to this conclusion in *Oligopoly Analysis and Regulation: Comments to BEREC*. He notes at paragraph 4: “There is no sound basis to distinguish between a ‘tight oligopoly’ and a competitive market equilibrium ...” At paragraph 6 he notes: “... capacity constraints are a key issue in distinguishing between markets that might be susceptible to joint SMP and ‘tight oligopolies’. Joint SMP requires an absence of capacity constraints, whilst tight oligopoly requires them to be present.”

However, BEREC has indicated that for non-cooperative ineffective competition one or more of the seven listed characteristics would need to be present, but none of the characteristics is necessary. That applies to capacity constraints as well as to the other six characteristics. Notwithstanding that, however, BEREC goes on to emphasise the importance of capacity constraints for ineffective competitive outcomes in oligopolies. BEREC refers to the case where all firms in a market cannot expand their capacity in the short term and none can supply the whole market demand. The result would be that no firm would increase its output and none would reduce its prices. The result would be

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856 Ibid, 15-6
ineffective competition in terms of price outcomes. BEREC says that, in this case, the ineffective competitive outcome in terms of price “does not result from coordinated conduct or tacit collusion, but simply because of technical constraints.”

This explanation by BEREC has difficulties. It does not describe those telecommunications markets in which the network operators have spare capacity as a consequence of the way in which they build and extend their networks have regard to expected peak demand conditions. In addition, since no individual characteristic or sub-set of characteristics from the seven listed is necessary or sufficient, it is a matter for broad judgment whether any single characteristics or sub-set of characteristics will be adequate to sustain the tight, but non-collusive, oligopoly conclusion that BEREC draws in any situation.

BEREC is clearly looking for a middle position in which ex-ante regulatory intervention would be justified even though collective dominance cannot be made out on the _Airtours_ criteria. BEREC’s approach is to recognise that the evidentiary standards for collective dominance have increased for all practical purposes since _Airtours_, and that, rather than allow the parallel behaviour to continue as a result, it is imperative to find an alternative justification for regulatory intervention, just in case the situation is not one of effective oligopolistic competition. BEREC describes the market condition that it is trying to address as one with inadequate or low “competitive intensity”, and with no incentives for investment and innovation of the kind that are provided by competitive pressure.

BEREC defines a “tight oligopoly” as “oligopolistic market structures that cause non-effective market outcomes, without explicit collaboration or tacit collusion.” In tight oligoplies, according to BEREC, “the firms take their competitor’s behaviour as given and not open to influences by the firm’s own actions. By providing individual profit-maximising responses to market conditions without expecting to influence their competitors, firms do not effectively compete.” This contrasts with tacit collusion,

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859 BEREC (June, 2015), 16
860 Ibid, 44: “In practice, it has been difficult for NRAs to demonstrate the existence of joint dominance (and therefore SMP) which would justify regulatory intervention.”
861 Ibid, 16
862 Ibid, 48
863 Ibid, 49
where “firms make choices that would not be in their interest if they assume that the other firms were uninfluenced by their conduct”.864

This is a very difficult distinction to assess and more difficult to apply in practice. It is unlikely to be apparent whether behaviour is in the interests of the actor or not. The criterion is really whether a less optimal option was chosen compared to other possibilities. The matter need not be further complicated, such as by the level of awareness of the firm at the time it made its choice, in order to be analytically challenging. The distinction may have some academic attraction but would be extremely difficult to apply in practice. Application would involve identifying the options available to the firm in question and assessing the financial returns that would apply in the shorter term and longer term for each option, taking account of the assessed risks, including the secondary and tertiary consequences of competitive reactions and responses to those reactions. The calculations would be assumption-laden and highly conditional at best. If, after such an analysis the behavioural path chosen was not the one that clearly best served the interests of the firm, the conclusion might be that there was tacit collusion. But the more likely analysis would be highly conditional and therefore unclear. The default conclusion would therefore have to be against tacit collusion.

**BEREC’s criteria for assessing tight oligopolies**

The criteria proposed by BEREC are not determinative. Their presence only makes the occurrence of a tight oligopoly more likely.865 The criteria that BEREC notes as some of the characteristics leading to tight oligopoly are:

- *High degree of market concentration:*866 However this can be a characteristic of markets that are tacitly collusive, even though oligopoly is not a necessary condition for collective dominance. BEREC does not define what a high level of concentration might be, especially compared with a sufficient level of concentration to support a conclusion of (ordinary) oligopoly. Presumably the level of concentration that might be sufficient for tight oligopoly is case-dependent, and therefore of little help as a general guideline.

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864 Ibid
865 Ibid
866 Ibid, 50
• **High entry barriers and no significant potential new entrants.** These two factors are considered to be important because they may embolden firms that are currently in the market to raise prices. However, these two factors are also important for a market structure to be characterised as conducive to collective dominance. Therefore they cannot be the factors that distinguish between a tight oligopoly and collective dominance.

• **High level of product differentiation.** The inclusion of this factor is a surprise. BEREC notes that “[w]hen there are many and/or close substitutes in the market, the prices will be closer to a competitive level for a given number of firms, because the consumers can easily substitute the products that have an increased price with the product of a competitor. In contrast, in a market with highly differentiated products the firms can raise the prices closer to monopoly level.” BEREC concludes from this that tight oligopoly is more likely to occur in these situations, in contrast with tacit collusion which is more likely when products are homogenous. It is by no means clear why product differentiation, and lack of substitution, should lead to a conclusion of tight oligopoly. It is more likely that the question would arise whether the products were in the same market at all; in which case neither tight oligopoly nor tacit collusion would arise.

BEREC gives the example of inter-modal competition between a cable television network operator and a fixed telecommunications network operator, where the bundles of services offered are homogenous but are in competition to some extent. It is unlikely that a customer would want full bundles from both service providers, and to that extent the choice of one results in rejection of the other. It does not follow that such services are sufficiently differentiated to prevent a conclusion of collective dominance, because both operators are in the same market. Price equilibrium might be maintained through lack of explicit price competition.

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867 Ibid
868 Ibid
869 Ibid, 50-1
870 Ibid, 51
871 Ibid, 50
• *Capacity constraints.* As already noted above, this appears to be the key differentiation between tight oligopoly and tacit collusion. BEREC observes: “In a tight oligopoly, where the firms make their capacity decisions unilaterally without taking into account their influence on competitors, a price increase of one firm might not be followed by an increase of the output of the competitors if they face capacity constraints.”

This example raises a number of issues. It suggests that an otherwise competitive market may become a tight oligopoly if spare capacity is eroded. Capacity levels can change quickly so presumably the change in characterisation of the market, from competitive to tight oligopoly and back again, can occur over a short period. This is not a criticism of the BEREC thesis, but it means that regulatory analysis and action may need to be very time responsive, or else run the risk of being mistaken.

BEREC notes that “in fixed telecommunications markets capacity constraints are unlikely to be present; they may be more likely in mobile telecommunications markets, e.g. in context of spectrum scarcity.” Hence, for a tight oligopoly to arise in fixed telecommunications markets factors other than capacity constraints may be more likely. BEREC does not suggest what these other factors might be, but later emphasises the conclusions that might be drawn from high prices over time.

If the absence of capacity constraints distinguishes tight oligopoly from collective dominance, and if capacity constraints are unlikely to be a major, ongoing characteristics of modern telecommunications markets, then it is difficult to see how tight oligopoly analysis can be useful in addressing the problems of oligopoly in telecommunications markets. In addition, there is a logical issue about an approach that requires the presence of capacity constraints (tight oligopoly) being considered as any form of fall-back, or Plan B option, if an

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872 Ibid, 51
873 Ibid
874 In the experience of the author, over 40 years of examining and analysing telecommunications traffic levels and patterns for costing, pricing and other purposes, neither of these statements is true. Fixed telecommunications networks are unlikely to have capacity constraints in terms of the access arrangements between the customers’ premises and the nearest network node (such as the local public exchange or switch), but may have transmission capacity constraints leading to time-of-day route congestion. In the case of mobile networks, if there were no busy hour (or peak time) then each hour would have 4.17% of the daily traffic (that is, 1/24), In practice busy hour traffic is typically from 8–12% of daily traffic, suggesting substantial spare capacity in non-busy hour (off-peak) times, even under conditions of spectrum shortage.
875 BEREC (June, 2015), 51
approach that requires the absence of capacity constraints (collective
dominance) fails.876

- *High switching costs, low growth of demand, low cross-price elasticity and no
countervailing buying power.*877 The same list applies to collective dominance
and therefore these factors cannot be used to distinguish tight oligopoly from
collective dominance.

BEREC states that “[r]egarding the market outcome of a tight oligopoly, a typical
indication for non-effective competition where regulation is not in place would be high
prices.”878 High price levels might be measured through international or regional price
level comparison (benchmark studies). In addition profit levels can be observed over
time as well. BEREC admits to the difficulty of determining the effectiveness of price
competition on a shorter term versus longer term basis, making allowance for dynamic
efficiencies to come into play over the longer term.

At the end of the analysis, after considering price levels and the other criteria listed,
BEREC concludes that, “[i]n any case, the identification of competition problems cannot
be made based on fixed criteria, but only case-by-case under (sic) consideration of the
specific market situation.”879 This may well be true, but it is an admission that there are
no individual characteristics or set of characteristics in markets that are determinative of
tight oligopoly. Therefore, one might question the explanatory value of the tight
oligopoly concept. In response to this, BEREC notes that, because the listed criteria
“may indicate and facilitate both tacit collusion and tight oligopolies” it is unlikely that,
in telecommunications regulation, the number of tight oligopoly cases will significantly
exceed the collective dominance cases that have been addressed by National Regulatory
Authorities.880 “That is to say, enabling NRAs to deal with tight oligopolies when
regulatory intervention is needed should not likely increase ex-ante regulation in terms
of quantity of cases but should improve its quality.”881 This is very much like saying that
what is needed is a second way in which ex-ante regulation can be imposed in the
limited number of cases that do arise if, for one reason or another, there are problems
in concluding in favour of collective dominance.

876 Feasey, R, Oligopoly Analysis and Regulation: Comments to BEREC, (June 2015, www.fronfraithltd.com),
1 and 7 [23] (Accessed 23 August 2015)
877 BEREC (June, 2015), 51
878 Ibid
879 Ibid
880 Ibid, 52
881 Ibid
BEREC recognises that it requires “an adequate standard of proof for a trigger in the case of tight oligopolies when no SMP can be found and enabling ex-ante regulatory action,” and does not have one at present.

It is not at all surprising that various respondents to BEREC’s public consultation, especially telecommunications service providers and network operators, rejected the approach that BEREC outlined. Many respondents expressed concern about the ambiguity and uncertainty associated with the concept of effective competition, and also with the ambiguity associated with concept of tight oligopoly and its application. Self-serving as many of these responses might be, they emphasise that there are problems with the concept and the certainty of its application. The BEREC initiative is still on-going and will feed into a full review of the European regulatory framework for electronic communications.

Conclusions

Airtours and other cases cited suggest that the problem of intentionality and actual purpose remains outstanding. The approach to the treatment of intentionality is at best formulaic – a reference that is a mantra without fully considered content. These cases also suggest that collective dominance has been analysed in such a way by the national regulatory authorities for telecommunications in the EU, that a high evidentiary standard has been applied before ex ante intervention will be sanctioned and considered to be justified.

However, following the market analyses by national regulatory authorities during the period 2004-2009, the approach of both the courts and of academic commentators has demonstrably shifted towards an objective one that is concerned with likely outcomes if

882 Ibid, 61
884 Ibid, 5: For example, Telefónica, which considers that an effectively competitive market as “a market that both lacks an SMP player, but which is also not perfectly competitive”. Also the GSMA (GSM Association) argued “that new oligopoly regulation will lead to uncertainty for investors, national regulators and competition authorities because ... the proposed oligopoly regulation appears to require a subjective determination of whether a market is functioning in the consumer interest.” Ibid, 10
885 Ibid, 23: e.g. Vodafone argues this way. Also, at 24: “According to ETNO, the concept of “tight oligopoly” rests on loose and discretionary criteria, with regard to terms such as ‘sub-competitive outcome’, ‘sub-competitive outcome’, “non-effective market outcome”, “profits above competitive levels”, which involve a very high degree of discretion. Ibid, 26: “Orange further notes that the “tight oligopoly” concept introduced by BEREC is not defined in the economic literature. Consequently identifying a tight oligopoly would be discretionary.”
886 Ibid, 30
887 See also the discussion in Chapter 7 above Footnote 724 and following.
the courts or regulators do not intervene. The concern is with Type 2 errors, where the disadvantages for the economy of continued sub-optimal competition persist because of the difficulty of meeting the new evidentiary standards for collective dominance. This shift is shown in the Sony case, in which bypass possibilities to the collective dominance criteria in Airtours are canvassed. The shift is also demonstrated in the academic literature, and specifically, in the more recent approach by Filippelli, and by the even more recent initiative by BEREC to explore an approach to tight oligopoly that is not based on the need to show collective dominance in the standard (or Airtours) sense at all.

Further, the body of regulators, BEREC, concerned with both ex-ante and ex post intervention, has also emphasised the inadequacy of collective dominance (and tacit collusion) to appropriately address issues associated with sub-optimal levels of competition in oligopolies, at least in the electronic communications sector, and the need for a further or alternative approach if collective dominance theory cannot be sustained in a situation where remaining economic bottlenecks or the market structure are likely to significantly impede the development of effective competition.

But there are logical reasons why it cannot be a fall-back. These approaches raise many additional issues, not the least of which is the concept of conscious parallelism “without more”, and its treatment in the future.

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888 M Filippelli (2013), op cit.
889 Ibid, 4 and 21
890 See earlier discussion on absence of capacity constraints for collective dominance and capacity constraints for tight oligopoly approaches. If collective dominance analysis fails on any other ground than absence of capacity constraints, and usually this is the case, tight oligopoly analysis cannot be a second line of investigation.
Chapter 9: Conclusions

Introduction

This chapter seeks to draw together and enlarge upon the conclusions that have been described in earlier chapters both generally and for the telecommunications sector. In particular in this chapter I shall characterise the manner in which both the law and economics have addressed, at various times, the issues associated with collective dominance and with tight oligopoly theory both from ex-ante and ex post perspectives.

After considering the history and current state of the legal and economic thinking on these issues, it is appropriate to suggest where the approaches to collective dominance and to close oligopoly theory might develop in the next several years, particularly in their application to the telecommunications sector.

Conflation of collective dominance and tacit collusion

As discussed in Chapter 3, collective dominance is a concept that relates to a position of strength in a market, whilst tacit collusion is a concept that is based on the notion of collusion or cooperation, albeit of a non-explicit kind. The former is a concept associated with the structure of a market, and with a position occupied within that structure. The latter is a concept associated with conduct or behaviour.

The two concepts have become conflated in academic analysis and in the case law to the point where any attempt at disentanglement would likely be fruitless. Nevertheless, it is an important conclusion to separate out structural issues from market behaviour, because, even though structure may facilitate certain behaviour, or provide fertile ground in which certain behaviour, such as anti-competitive behaviour, may occur, conclusions about structure cannot be determinative about the behaviour that might follow. It does not follow that because a market is oligopolistic, mature, and static and that the cost structures and market shares of the few competitors are

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891 Chapter 3, above footnote 159
892 Chapter 3, above footnote 158
893 See discussion in Chapter 3, above footnote 161 and following
894 For example, in Gencor Ltd v Commission [1999] 4 C.M.L.R. 971 at 1057, where the Court regarded factors supporting collective dominance as increasing tacit collusion in the form of anti-competitive parallel behaviour [paragraph 222]
similar, the competitors will collude or have colluded in practice to sustain prices above a competitive level. The most that might be concluded with some level of confidence is that previous association of the structural conditions with anti-competitive outcomes is that the risk is material and compelling in favour of some form of anticipatory regulatory intervention.

The persistence of the explicit agreement paradigm

Explicit collusion between competitors to determine market outcomes, involving communications between them and agreement on common purposes and market strategy, has long been unlawful as a restraint of trade. Article 101 of the TFEU makes this clear and lists categories of agreement and concerted practice that are prohibited.

An important conclusion is that the law has developed with the explicit agreement paradigm as a central guide for tacit collusion. The case law expresses a degree of caution in moving from the notion of explicit agreement with communication and possibly with written or other evidence, to a view of collective dominance in which elements of the explicit agreement paradigm are carefully substituted.

In the development of collective dominance, parallel behaviour, such as parallel pricing, has always been considered to be insufficient evidence of collusion without more, or unless the result could not be explained in any way other than through cooperation on the part of the competitors concerned. The burden of showing that there was cooperation of a collusive kind between the competitors falls on those asserting that conclusion. However the burden might transfer to the competitors involved once a compelling case had been made that the parallel behaviour and the manner in which it might have developed or changed, also in parallel, were too complex to be reasonably

895 These structural characteristics have been identified as important for collective dominance; see the list contained in the Better Regulation Directive (Directive 2009/140/EC) (of the European Parliament and of the Council of 25 November 2009), discussed in Chapter 2 above footnote 140 and following.
896 These structural characteristics may facilitate or provide some incentive for collusive behaviour but there is no inevitability about them being a cause of such behaviour; see the discussion in Chapter 2 and particularly above footnote 140
897 See, for example, the approach in the seminal American case, Theatre Enterprises v Paramount Film Distribution Corporation (1954) 346 U.S. 537 at 541.
898 See, for example, Cases C-89/85, A Ahlstrom Oy v Commission [1993] ECR I 1307 (Woodpulp II) at [71] where the Court stated that “… parallel conduct cannot be regarded as furnishing proof of concertation unless concertation constitutes the only plausible explanation for such conduct.”
considered to be the result of individual competitors making individual and separate decisions entirely in their own interests.\(^{899}\)

The European courts began the process of analysis by considering how competitors in a market might act in unison, or in concerted ways. The first set of answers to this question was to note that sometimes competitors had structural links that served to coordinate their interests and decision-making so that they might on occasion act as if they were a single undertaking.\(^{900}\) Having common shareholding or one or more board members in common might be sufficient to constitute such a link.\(^{901}\)

Alternatively, if suppliers were members of trade associations or of other industry bodies or trading groups, then the actions of the body to which they belonged might be sufficient to provide a basis for cooperation in the market place.\(^{902}\) Such bodies might seek to develop orderly marketing or other industry arrangements, or develop standardised contracts and price terms for their members to adopt, and might, in the process, be an agent for publication and ready communication of industry information amongst members. Industry associations, as well as individual pulp producers, performed this role through publication in the trade press for the paper pulp manufacturing industry in *Woodpulp II*.\(^{903}\)

Another recurring type of industry body in the case law is the shipping conference, the economic justification for which is to enable shipping lines and other ship operators to coordinate to provide regular services between locations. Shipping conferences arose in cases such as *French West African Shipowners’ Committee*;\(^{904}\), *Compagnie Maritime Belge Transports SA v Commission of the European Communities*;\(^{905}\) and *Atlantic Container Line and Others v Commission of the European Communities*.\(^{906}\) Within the

\(^{899}\) See discussion in Chapter 5, above footnote 409 and following.


\(^{901}\) See, for example, *United Sugar*, (Joined Cases 40-48, 50, 54 to 56, 111, 113 & 114/73), *Cooperatieve vereniging “Suiker Unie” UA and Others v Commission*, [1975] ECR 1663, and the discussion above footnote 392 and following, and particularly above footnote 397

\(^{902}\) See, for example, *Compagnie Maritime Belge Transports SA v Commission of the European Communities* [2000] 4 C.M.L.R. 1076, in which the collective entity was a shipping conference, Cewal, to which the plaintiffs and other shipping firms belonged: above footnote 426 and following

\(^{903}\) (Cases C-89/85) *A Ahlstrom Oy v Commission* [1993] ECR I 1307 (*Woodpulp II*): In this case the European Court found that the practices of the pulp producers in announcing quarterly prices were in fact of long standing and of benefit to the paper manufacturers and other purchasers of wood pulp, rather than to the suppliers of wood pulp, the associations’ members.

\(^{904}\) [1993] 5 C.M.L.R. 446

\(^{905}\) [2000] 4 C.M.L.R. 1076

\(^{906}\) (T191/98) [2005] 4 C.M.L.R. 20 (*TACA Case*)
European Union shipping conferences are typically authorised to operate, but within specific constraints that are designed to protect competition between conference members and other shipping operators in the same market.\textsuperscript{907}

In the shipping conference cases, members have been held to have behaved in a manner which was an abuse of a collectively dominant position.\textsuperscript{908} These cases treated the conference secretariat and the shipping lines involved as being linked through the rules of the conference. For the most part the shipping lines operated as a single entity with a single purpose of the kind that might arise from an explicit collusive agreement.

However, common ownership or governance arrangements, and membership of trade associations fell far short of the range of circumstances in which collective dominance and oligopoly might pose problems for effective competition.

The courts further developed the notion of links to include economic links,\textsuperscript{909} and finally accepted that there might not need to be structural or economic links at all, for tacit collusion to arise.\textsuperscript{910}

In the paradigm case, the parties determine and confirm their common purpose – such as to maintain prices above competitive levels - and the actions they will take to pursue that common purpose, through communications of some kind based on clear intent. In the case of collective dominance and tacit collusion, however, the courts and the academic writers needed to find alternative ways in which common purposes might be formed and compliant behaviour monitored.

As discussed in Chapters 3, 4, 5, 6 and 8, three broad non-exclusive approaches to this problem were developed and refined.

\textsuperscript{907} Ibid [31-40]: In the Trans-Atlantic Conference Agreement (TACA) Case, the agreement was notified to the Commission pursuant to Regulation 4056/86, under which certain liner conference agreements have an exemption from Article 85(3) of the Treaty, provided the conference agreement applies uniform or common freight rates. In the cases of TACA the Commission denied an exemption sought on the ground that some of the activities notified fell outside the scope of the Regulation. The activities in question concerned “the fixing of transport rates, the conclusion of service contracts and the remuneration of freight forwarders”. [50] The plaintiffs appealed and Court of First Instance, amongst other findings, in rejecting the appeal relating to collective dominance, concluded that the “existence of a collective dominant position may therefore flow from the nature of the terms of an agreement, from the way in which it is implemented and, consequently, from the links or factors which give rise to a connection between undertakings which result from it.” [610]

\textsuperscript{908} Ibid, 1427-8 [601]

\textsuperscript{909} See discussion, “\textit{Gencor}: Economic links and parallel behaviour”, above footnote 452, and following.

\textsuperscript{910} See the discussion on this point in \textit{Gencor Ltd v Commission} [1999] 4 C.M.L.R. 971, 1065 [276] above footnote 465 and following.
The first was the notion that various forms of behaviour could facilitate tacit collusion. The second was that certain types of market structures might also facilitate collective dominance and assist in its maintenance. The behaviour that such market structures might support could, in turn, provide further facilitation. The third development was the theory of repetitive games in which participants through trial and error in earlier rounds of a game might individually determine that a collectively optimum outcome was desirable and could be best achieved by non-competitive or sub-optimally competitive behaviour on their part.

Conclusions on facilitating practices

As outlined in Chapters 3 and 4, economic and legal academics, and the courts, developed the notion of facilitating practices, or “plus factors”, which might be sufficient in the circumstances of a particular market to enable the development of market monitoring mechanisms by which common purposes might be reinforced and compliance through appropriate behaviour might be better ensured. The presence of these factors might, in appropriate market circumstances, be enough to conclude that conscious parallelism was collusive, rather than the natural result of market forces outside the control or responsibility of any market participant or group of market participants.

The term “facilitating practices” is theory-laden and is suggestive of the conclusion that might be applied to the practice or behaviour in question. Whether the practice or behaviour in question is designed to facilitate tacit collusion or merely to improve the competitive position of the participant in question is an important further question. For example, an undertaking by one competitor in a retail market not to be beaten on price for an identical product or service could facilitate collusive arrangements within an industry not to sell below a prevailing price, by using the retail customer as the information source if deviation from the common position happens. Alternatively, such an undertaking to retail customers could simply improve the position of the participant concerned, and, in the process, help to develop a reputation for being a low price provider (when competition so demands). The advantage for the participant in this

911 See Chapter 3, above footnote 200, and following discussion.
912 As in, for example, E I Du Pont De Nemours & Co v FTC, (1984) 729 F 2d 128, where the US Court of Appeals held that the facilitating practices there (specifically, the use of “most favoured nation” clauses) were of long standing and the decline in the industry was a matter beyond the control of Du Pont and other suppliers of additives to lead petrol. The practices were favoured by powerful customers with substantial leverage. See above footnote 352 and following discussion.
approach is that it does not have to reduce prices generally, but only in response to proven lower competitor prices.

Facilitating practices align with the explicit agreement paradigm by replacing the need for such agreement by practices that improve overall market transparency and information sharing within the market.913

But, as the example set out above shows, facilitating practices might be themselves ambiguous and require interpretation in the context in which they occur. No facilitating practice could be said to be determinative of collective dominance per se, although some practices may admit of less ambiguity than others.914

Conclusions on market structure

Aspects of market structure may be conducive to tacit collusion just as specific facilitating practices may do so. Although the two concepts – conducive structures and facilitating behaviour – are distinguishable, in practice they may be linked. For example, some characteristics of market structure, such as oligopoly, might enhance the chances of facilitating behaviour being effective. In the circumstances of the Du Pont case915 the alleged facilitating practice took the form of an offer not to be beaten on price, or, in other words, to meet any competitive price. This offer might have been effective in establishing and sustaining tacit collusion because the market in question has few competitors. Indeed, if there were many competitors that fact alone would tend to support the conclusion that the offer was no more than part of an individual competitor’s sales and promotional strategy.

Characteristics of market structure that have been found by the courts and the European Commission to be conducive to collective dominance both generally and in the telecommunications sector are discussed in Chapters 4916 and 7.917

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913 For example, the specific facilitating practice might create additional incentives for customers and users to facilitate information exchange when it is in their interests to draw one competitor’s price and terms to the attention of another. Note however that customers are not necessarily passive agents, and therefore might be inclined to advise competitors’ prices to other potential suppliers for their own advantage, and without the need for facilitating practices to act as an incentive.

914 For example, in the Du Pont case, op.cit, where the court, in overturning the order of the FTC, determined that neither individually nor collectively did the facilitating practices result in a conclusion that practices were contrary to the Sherman Act.

915 E I Du Pont de Nemours & Co v FTC (1984), op cit.

916 In Chapter 3 see discussion under the heading, “Structure-Behaviour-Performance Paradigm”, above footnote 216 and following, and also under the heading, “Structural aspects of markets conducive to collective dominance”, above footnote 245 and following.
In the circumstances of ex-ante regulatory intervention and for merger control, conducive characteristics of market structure, such as similar market shares, high market concentration, substantial economies of scale and scope, high entry barriers, and similar cost structures, can only apply in a probabilistic way. Neither singly nor in aggregate are the characteristics necessary or sufficient for a conclusion of collective dominance. A detailed analysis is necessary to show how they might, in the circumstances of the particular market, be considered reasonably likely to result in a collectively dominant position which the relevant competitors will have great incentives to exploit or abuse.

In the case of ex post competition law enforcement there will be evidence of specific behaviour which will be assessed in terms of whether it might constitute acceptable competitive behaviour or anti-competitive behaviour enabled by collective dominance.

Conducive market characteristics are a development based on the explicit agreement paradigm. These characteristics replace the need for such agreement by other, structural features of the market that improve overall market transparency and information sharing within the market.

Conclusions on Repetitive Game Theory

Although theories about games and the mathematical possibilities open to players have been around for centuries, it was from the mid-20th Century onwards, following the work of John Nash, that economists commenced examining the insights that repeated...
games might have on the development of price and capacity equilibria in markets and on the nature of such equilibria where markets involved few players. The conclusions arrived at through game theoretic analysis were that players in games with few participants had considerable incentives to seek a risk-adjusted optimised collective outcome rather than a high risk, lower probability outcome in which individual gain might be maximised. This approach was supported by theoretical (probability) analysis as well as empirical experimentation.

For our purposes, in examining the caution of economists and the courts in moving away from the explicit agreement paradigm, the conclusions based on game theory enabled greater certainty to be attached to the probabilistic forecasts of behaviour based on structural characteristics of markets. In particular, the Chicago school declarations that the structure-behaviour-performance paradigm was of no value and no longer supported by serious analysts were considerably undermined by the conclusions from game theory on market behaviour and performance outcomes.

Game theory provided a degree of rigour in forecasting behaviour and behavioural incentives in potentially collusive markets.

**Difficulties in applying effective or workable competition**

As outlined in Chapters 2 and 3, the concept of workable competition was developed in contradistinction to other approaches to competition, and, in particular, to the concept of perfect competition which heavily underpinned much of the legislation of the 1940s and 1950s that favoured smaller enterprises.

Initially the term, workable competition, was intended to be elastic and to cover situations in which rivalry between competitors in a market existed in relation to price

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924 "The idea [of repeated games] is that players can be induced to act more in their collective interest, rather than their individual interests, through the use of trigger strategies that punish defections, i.e. actions contrary to the collective interest." [Werden (2004), op. cit., 730]

925 See discussion in Chapter 3 above footnote 197 and following.

926 Werner (2004), op.cit, at 729-30

927 See discussion in Chapter 3 under the headings, “Structure-Behaviour-Performance Paradigm”, above footnote 247 and following, and “The Harvard and Chicago schools of economics”, above footnote 320 and following.

928 The structures of the repeated game are analogous to structural characteristics of markets and variations in such structures in the context of a repeated game clearly impact on the outcome. Repeated game experiments show a strong adherence to positions of equilibrium, [Werner (2004), op.cit, 731-2] contrary to the suggested by Chicago school adherents that tacit collusion in markets is inherently unstable and prone to collapse without the need for regulatory intervention.

929 See Chapter 2 above footnote 39 and following, and also in Chapter 3 above footnote 234 and following

930 See Chapter 3 above footnote 237 and following
and performance and could be sustained. The Chicago school in particular considered that workable competition was all that might reasonably be hoped for in competitive marketplaces.

However, this approach was considered to be inadequate and imprecise by some economists. Markham and others defined workable competition, or effective competition, as the competition that arises in market situations where no new policy implementation could be made that would result in a net increase of social gains, that is, where social gains would be greater than social losses. This definition is very difficult to apply in practice, and can only be applied with confidence after considerable empirical economic research of the relevant market. More importantly, the definition does not align with the concerns that lawyers and economists have about collective dominance and tacit collusion. There may well be situations in which no new policy initiatives might be available leading to net social gains, and yet the resultant level of competition might not satisfy an intuitive test for effective competition.

As an example, imagine a mobile telecommunications market catering for a small population in which there are two mobile network operators with market shares that are similar, in which the regulator has implemented mobile number portability, and which is open to entry by new operators. The downside is that tariffs for both operators have been reduced only slowly over the years, and at a rate less than the decline in network equipment costs. It would appear that there is no policy initiative including price regulation that would result in net social gain in this situation. And yet, it is with reluctance that one would say that the level of competition between the operators was effective.

931 See Chapter 3 above footnote 241 and following
932 For example, see Easterbrook, F H, ‘Workable Antitrust Policy’ (1986) 84 Michigan Law Review 1696
934 Ibid, 361
935 See discussion in Chapter 3 above footnote 242
936 In this situation the operators would probably claim that the bulk of their non-volume related purchases occurred when they entered the market at price levels obtaining at that time, and that, consequently, only a partial benefit has from equipment cost reductions in the meantime.
937 In this situation, where the size of the population is likely to be a constraint on access and usage growth possibly before most scale economies are exhausted, the operators would likely argue that they sought to gain maximum initial network utilisation and customer take-up through prices that reflected service penetration at the second or third year. That is, cost recovery was deferred as a deliberate entry strategy, and. As a result, prices are unlikely to reduce proportionate to costs in those later years.
938 Oligopolies may be competitive, but acceptance of that may be with reluctance, and not necessarily in cases like the example provided above.
The conclusion to be drawn here is that the same list of non-deterministic factors that might lead to a conclusion of collective dominance is relevant to a conclusion of effective competition. It is therefore also only a probabilistic conclusion that a market is effectively competitive.

**Oligopoly and collective dominance are constant itches for academics and the courts**

Related to the previous conclusion that ambiguities and intuitive misalignments associated with the concept of effective or workable competition is the further conclusion that no approach developed so far has been accepted as both authoritative and fully satisfactory for addressing abiding concerns about oligopoly and collective dominance.

The *Airtours Case*[^939] has been widely accepted[^940], including by the European Commission[^941], as laying down in an authoritative way the three criteria, including a criterion relating to transparency that must be present in order for a conclusion of collective dominance to be sustainable before the courts. However, the European Court in previous cases such as *Compagnie Marine Belge*[^942] and *Gencor*[^943] set out ways in which the requirement for transparency might be assumed to have been met based on past linkages[^944]. The approaches in these earlier cases have been pursued in *Sony*[^945] as

[^940]: For example, in Langer, J, ‘The Airtours Judgment: A Welcome Lecture on Oligopolies, Economics and Joint Dominance’, (2003-4) 10 Columbia Journal of European Law 105; Kuhn, K-U, ‘Closing Pandora’s Box? Joint dominance after the Airtours judgment’, (http://ssrn.com/abstract_id=349521. Paper prepared June, 2002); Overd, A, ‘After the Airtours appeal’ (2002) 23(8) E.C.L.R. 375; with reservations by Dethmers, F, “Collective dominance under EC merger control – after Airtours and the introduction of unilateral effects is there still a future for collective dominance? (2005) E.C.L.R. 26(11), 638; and Nikpay, A and F Houwen, ‘Tour de force or a little local turbulence? A heretical view of the Airtours judgment’, (2003) E.C.L.R. 24(5), 193, (although much of the credit for the CFI decision is given to Gencor v Commission). This view is by no means universal or without qualification. In an important assessment Andrew Scott (“An Immovable Feast’?: Tacit Collusion and Collective Dominance in Merger Control after Airtours, Centre for Competition & Regulation Working Paper CCR 02-6, UEA Norwich, 2002) noted: “In the judgment of the CFI – and subsequently, in much of its attendant commentary – there is an overplayed analogy with the explicit collusion evident in anti-competitive agreements. ...it may be borne of the belief that because economic theory is indifferent as to how collusion is achieved so long as it is sustainable, tacit collusion is effectively the same as an anti-competitive agreement. It is not.” (17) This point is a major one for the current thesis. However it recognises the importance of the case in the jurisprudence of collective dominance.
[^941]: Levy, N, ‘Mario Monti’s Legacy on EC Merger Control’, [2005] 1 Competition Policy Control, 99: “The court’s judgments  [in Airtours and two other cases] received wide, often critical, coverage in the media and caused the Commission to conduct a swift review of the underlying weaknesses in its application of the merger Regulation.” (108)
[^942]: *Compagnie Maritime Belge Transports SA v Commission of the European Communities* [2000] 4 C.M.L.R. 1076
[^943]: *Gencor Ltd v Commission* [1999] 4 C.M.L.R. 971
[^944]: Ibid, 1065 [276-7]
discussed in Chapter 8. The point is that the authoritative position reached in relation to collective dominance in Airtours, as it would appear from the approach of the European Commission and national regulatory authorities in the case of telecommunications, required high standards of evidence and of compelling analysis. The result was that many oligopolistic markets would escape regulatory or competitive oversight and intervention for collective dominance. That, in turn, is of concern because of the basic scepticism, already referred to, that such markets, despite all the analysis that suggests otherwise, are not effectively competitive.

Some legislatures, outside the European Union, have “resolved” the problem of uncertain or inadequate regulatory and competition outcomes by including in general competition legislation or in sector-specific legislation an alternative approach for regulatory agencies based simply on market share, so that, if minded, an agency might deem or declare an undertaking with more than, say, 40% share in any market to be dominant or have significant market power. This approach remains common for telecommunications markets. It results from seeking to force the certainty of per se rules onto complex and uncertain market situations, as well as from frustration with the ambiguity of available analytical instruments and analyses. But it is very likely that such simplistic rules may be simply wrong or lead to outcomes that mean no more than dominant means “big”. For example, unless the ability to operate without undue concern for the reaction of competitors, customers and consumers is present, then a 40% plus market share may be irrelevant for dominance. Since dominance relates always to power in a market, the relationship of the undertakings competing in the market cannot be ignored. If there are two competitors with over 40% market share – commonplace in many telecommunications markets - then the 40% rule says that both are dominant. This

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946 See Chapter 7, above footnote 804 and following
947 See Chapter 6 above footnote 607 and following, and especially the discussion above footnote 721 and following
948 See, for example, the sector specific examples in footnote 949 below.
949 For example, as a rebuttable presumption, defining dominance by market share occurs in such dissimilar markets and jurisdictions as the European Union (Commission Guidelines on Market Analysis and the Assessment of a Significant market Power, 2002/C 165/03, [75] (The SMP Guidelines)); Vanuatu (Telecommunications and Radiocommunications Regulation Act, 2009, s.21(1)(a)); Saudi Arabia (Telecommunications Act, 2001, Article One – definition of ‘dominant operator’); Samoa (Telecommunications Act, 2005, s.26(1)); and many in between.
951 Reasonably common in markets with only two mobile operators
conclusion cannot be sustained logically if both are said to be singly dominant. To say that the two competitors are collectively dominant is to assert that irrespective on anything they do or however ferociously they compete on price or other factors, they will be treated as cooperating or as being at such imminent risk of cooperating, that any actual behaviour to the contrary and any performance outcomes, will be considered of no consequence. It cannot be an acceptable function of competition policy to automatically substitute regulation for actual competition where the latter is unambiguous, apparently effective and sustainable.

As discussed in Chapters 6 and 7 other approaches have been developed and are being refined to provide relief to the collective dominance and oligopoly “itch”.

**Divergence of methodologies and the application of evidence for ex-ante and ex post intervention**

Strictly speaking, the evidentiary standard that applies in all cases of regulatory and judicial intervention to address market dominance issues, whether on an ex-ante basis or an ex post basis, is the balance of probabilities. However, the burden of proof may change in the course of a judicial or regulatory enquiry. For example, if the competition authority has established that paralleling pricing behaviour has occurred in an industry in which price announcements are typically made by trade associations from time to time, then the evidentiary burden might well switch to the competitors in the industry to explain industry and association practices in ways that are consistent with competition or non-collusive.

However the way in which a case might be developed and the evidence used to do this differ in the case where the regulator is exploring whether to intervene ex-ante compared to the case of ex post intervention by a competition authority.

The former is concerned with intervening in anticipation of market failure and before any particular behaviour may be manifest. Ex-ante intervention is based on a forecast of what might occur with some material or compelling level of probability. There may have been past behaviour that is relevant and can be considered, but this would not be necessary or sufficient. As explained in Chapter 7, European telecommunications regulators have been provided by the Commission with guidelines on factors that may

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952 This leaves aside the criminal prosecution possibilities that may exist in legislation – such as under the US Sherman Act, (1890) 26 Stat. 209 (US), s. 1
953 As occurred in Woodpulp II, op.cit.
be relevant to ex-ante intervention to address the risk of collective dominance even though these factors are not determinative whether considered alone or in aggregate.\textsuperscript{954} The response on such cases cannot be simply that no collusive behaviour has occurred, even though that is a standard part of any response by competitors, because explicit agreement and collusion is not being alleged. The response of the industry competitors alleged to be collectively dominant will need to be in terms of a more compelling alternative interpretation of industry forces and the incentives for individual undertakings in the industry. It will likely be a case of one picture of the industry being advanced in competition with another, but with the overall burden of proof falling on the regulatory agency or other party asserting a conclusion of collective dominance.

Merger administration involves similar forecasts of the impact of the proposed merger and whether there will likely be substantial lessening of competition\textsuperscript{955} in the future market with the merger compared with the future market without the merger.\textsuperscript{956}

Both merger administration and ex-ante regulation are in contrast with ex post intervention in which the court or the competition authority need to examine behaviour that has occurred and which is alleged to constitute abuse of collective dominance by one or more of the allegedly collusive firms. In this case the competition authority or the court needs to have evidence that is more than an appreciable risk or probability of collective dominance. They need to have evidence of behaviour that is an abuse of dominance which is in breach of anti-competitive or per se prohibitions.

If there is evidence of behaviour – such as parallel pricing that has been maintained above competitive levels over a substantial period\textsuperscript{957} - and if this can be reasonably related to market structure conducive to collective dominance, then the regulators and the courts may consider that they are on firmer ground than with ex-ante intervention. However, as the telecommunications cases after 2002 show, the matter is by no means simple, and the relevant behaviour has to be considered in the full context provided by an analysis of the market structure. As discussed in another industry context in

\textsuperscript{955} The test is now whether the merger would “significantly impede effective competition, in particular as a result of the creation or strengthening of a dominant position, in a common market or substantial part of it”, Merger Regulation (Council Regulation No 139/2004 of 20 January 2004), Article 2.
\textsuperscript{956} Guidelines on the Assessment of Horizontal Mergers under the Council Regulation on the Control of Concentrations between Undertakings, OJ C031 (5 February 2004), 5, [9]
\textsuperscript{957} The situation that occurred in some of the telecommunications cases that arose after the Framework Directive of 2002
The behaviour might be so readily disturbed or disrupted by the actions of firms not within the allegedly dominant group that a conclusion of collective dominance cannot be sustained.

The conclusion to be drawn from this is that an ex-post approach might be a surer basis for intervention to address collective dominance, but that the recent history of telecommunications regulation suggests that both ex-ante and ex post conclusions of collective dominance have been few in number.

**Telecommunications is persistently oligopolistic and, in some markets, monopolistic**

In Chapter 7 arguments were advanced as to why telecommunications markets are persistently oligopolistic. Therefore, even though the incidence of regulatory or judicial findings of collective dominance is low, these markets remain populated by a single or relatively few network operators all of whom have made or are making substantial capital investments in their networks and systems for the provision of services and applications over the longer term.

Telecommunications services are considered to be fundamental to the economy as a whole. They are a required input for all modern businesses. Telecommunications services underpin the online economy and online transactions between buyers, sellers, government and other participants in modern economies. Telecommunications is a necessary part of the modern infrastructure supporting economic transactions across the board. Therefore, the price and performance levels in the sector are important for the cost structures and performance in other sectors.

It follows that governments and regulators, as well as all participants in the economy, will be concerned if the delivery of such fundamental services is impeded or distorted by uncompetitive market structures or by the maintenance of prices above competitive levels.

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959 Ibid, [62]
960 Chapter 6, especially above footnote 569 and following
961 In an increasingly online economy, the prices of telecommunications services as a fundamental input into all segments will affect the productivity and price levels of those segments in turn.
Reluctance to conclude in favour of collective dominance in telecommunications markets

As already noted and analysed in Chapter 7, there has been a marked reluctance by national regulatory authorities and by the European Commission to find in favour of collective dominance in telecommunications markets.

The Airtours Case is considered to have set a high bar for such findings. The European Commission’s guidelines and the factors for consideration in Annex II of the Framework Directive followed suit. The difficulties for collective dominance include whether transparency is adequate to establish and then monitor adherence to a common policy, particularly given the variety of telecommunications service tariffs that are in operation, extended by the relatively recent development of service bundles; whether the resumption of competition, particularly price competition, is an adequate threat to ensure compliance or an adequate inducement to encourage continued collusion; and the prospects for new entrants and minor competitors, not part of the alleged collectively dominant group, to disrupt or prevent the continued flow of collusive benefits to members of that group.

However, given the policy reasons for concern about anti-competitive collusion in the provision of such fundamental infrastructure services, it is not enough to determine that collective dominance does not exist in most telecommunications markets. The exception is single dominance. If the conclusion that a single firm is dominant in the market, this becomes the basis for regulation of the industry, via asymmetrical regulatory obligations placed on the singly dominant firm. If the market analysis is correct and the firm is genuinely singly dominant in the market, then the imposition of regulatory obligations on the dominant firm would typically be sufficient to regulate...
prices in the market as a whole, given the position of the dominant firm as likely price leader.

But if neither a conclusion of single dominance nor a conclusion of collective dominance can be sustained by the circumstances of the market, the regulatory agency will have a difficult choice. It will have to forbear altogether, relying possibly only on ex post approaches, or look elsewhere for a rationale to justify ex-ante intervention that it might consider necessary or desirable.

**Tight Oligopoly Theory in telecommunications and generally**

As discussed in Chapter 7, one important alternative to collective dominance now being developed and considered for oligopoly regulation, especially in telecommunications, is the concept of a tight oligopoly. BEREC\(^{969}\) has been considering the possibility of tight oligopoly as an alternative to collective dominance in telecommunications markets.\(^{970}\) BEREC describes its conception of a tight oligopoly as follows:

> These [non- or sub-competitive market] outcomes may be the result of tacitly colluding oligopolies (joint dominance) or of tight oligopolies where coordination does not occur but the market structure is not conducive to effective competition.\(^{971}\)

BEREC’s initiative is ongoing, and it is too early to determine whether it will lead to additional tools being available to telecommunications regulators in the European Union to justify and guide ex-ante intervention in oligopolistic markets in situations where the available evidence does not support collective dominance outcomes.

However, it is not too early, in the light of the public consultation process undertaken by BEREC and submissions received to date to draw some conclusions, namely:

- The concept of a tight oligopoly has so far been loosely drawn and applied. This may turn out to be necessary to ensure that the markets concerned are subject to complete analysis by regulators and the courts, rather than the proforma analysis encouraged by simplistic rules based on arbitrarily-chosen metrics, (such as the 40% market share rule for dominance retained in some legislation

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\(^{969}\) Body of European Regulators for Electronic Communications, [www.berec.europa.com](http://www.berec.europa.com)


\(^{971}\) Ibid, 5
referred to earlier in this chapter). Nevertheless improved guidance on the necessary or sufficient characteristics of a tight oligopoly is needed, even if it cannot be in terms of the total number of competitors or levels of concentration required to be “tight.”

- The telecommunications service industry is naturally wary of the concept, seeing it as a “second string” in the regulator’s bow, to be used if the “first string”, collective dominance, fails. The thought process here is that the regulator is being less than neutral and objective, and will want to have a basis for intervention at all costs. Regulators have obligations to be non-discriminatory, objective and to implement processes that reflect natural justice principles, but they have a mandate to implement State policy. They are not neutral in the sense of being indifferent about successful policy implementation or to ignore persistent non-competitive markets if the policy framework requires otherwise.

- Distinctions between markets with collective dominance and tight oligopolies may be difficult to make, but may be unnecessary. One commentator noted that, from its published papers, BEREC seemed to be saying that if there was spare capacity in a market, then the market in question was a candidate for collective dominance because spare capacity enabled the threat of sanctions for non-compliance with the collusive practices to be carried out. Alternatively, the absence of spare capacity might point to a tight oligopoly. Whether competitors in a market have spare capacity is often a function of purchasing schedules and demand patterns, since capacity is often purchased in blocks or modules. In some industries, such as telecommunications, capacity may be a matter of activating the existing capacity potential of additional fibres in a cable.

In such cases the operator will be doing no more than adopting industry

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972 A requirement for greater clarification of the characteristics of a tight oligopoly may be less in the case of telecommunications network service markets, where four or less competitors is often the norm. However, if the tight oligopoly theory is to have a wider impact and be applicable across the economy some further guidance seems to be necessary. See BEREC, op.cit., 15-6

973 In practice NRAs adopt a sequence of procedures, each one of which may be regarded as a “string” to their bow. They are, in order, market definition, tests for susceptibility of the relevant market to ex ante intervention, market analysis for single dominance, and market analysis for collective dominance. See also reference to such an analytical sequence in BEREC (Body of European Regulators for Electronic Communications), 'BEREC Report on the public consultation of the Report on Oligopoly analysis and regulation' (Brussels, 6 November 2015) [http://berec.europa.eu/eng/document-register](http://berec.europa.eu/eng/document-register) (accessed 22 November 2015), especially referring to the comments from Liberty Global at page 22: “Liberty Global has serious doubts that the notion of tight oligopolies does not serve as a ‘regulatory joker’ to be applied by NRAs when a joint dominant assessment is unsuccessful.”

974 Feasey, R, *Oligopoly Analysis and Regulation: Comments to BEREC*, (June 2015, [www.fronfraithltd.com](http://www.fronfraithltd.com)) Accessed 23 August 2015: “... the concept of a ‘tight oligopoly’ is a slippery one which too easily lends itself to a subjective judgment by the NRA or Commission.” [11]

975 BEREC (June 2015), op.cit., 16
practices based on the prevailing technology. Where the capacity in issue is radiofrequency spectrum mobile operators have been able to meet increased demand over a long period through technologically-driven improvements. These considerations make it fairly clear that capacity is not a suitable normative means of differentiating markets into those that are tight oligopolies and those that are not. More importantly, the need to differentiate should be queried, especially in telecommunications markets where additional capacity can be activated at short notice.

- Tight oligopoly theory represents a clear break from the explicit agreement paradigm of collusion. This may be obvious, but is important for the future control of oligopoly markets. Firstly tight oligopoly is not about collusion at all, whether explicit or tacit. Therefore, secondly, its application requires no consideration of intentionality. However, this is not of concern, because ex-ante measures are not based on responses to anti-competitive behaviour or on intentions to engage in anti-competitive behaviour.

- Tight oligopoly theory is intended to be objective in the sense that the regulator will determine based on objective evidence about the market whether a tight oligopoly exists with potential for non-competitive outcomes, and will then be able to determine whether ex-ante intervention may be justified to reduce the risk of those outcomes. The imposition of ex-ante obligations on the competitors that constitute the tight oligopoly will modify behaviour either indirectly through changes to market structure or directly, such as through price control.

Other writers have also proposed approaches similar to tight oligopoly theory. For example, Filippelli has observed that the concept of abuse is objective under Article 102

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976 “Although demand is growing in mobile markets and the industry constantly warns of a capacity crunch, the truth is that the industry has consistently been able to outpace demand with improvements in technology and by deploying more spectrum for the past 25 years.” Feasey (June 2015), op.cit., [24] Feasey might have mentioned that amongst the improvements in technology has been increased spectral efficiency.

977 For example, bandwidth capacity on fibre routes, spectral capacity (within limits) at specific locations, and processing capacity associated with applications and other transactions. Other forms of capacity may take longer to establish – such as increased tower loadings, co-location capacity (if it depends on third parties), and bandwidth capacity for network transmission equipment based on older technologies, such as microwave.
of the Treaty\textsuperscript{978} and that this is a basis for intervention ex post if the market is tightly oligopolistic.\textsuperscript{979}

**Some near-term prospects for oligopoly control in telecommunications and more broadly**

It has been said, in relation to behaviour that derives from oligopolistic interdependence – such as conscious parallelism – that it would be impossible to develop suitable orders to impose on the competitors involved because each of them could hardly be expected to act irrationally and to ignore the behaviour of other competitors in the market.\textsuperscript{980}

We can now see that this line of argument was based on certain incorrect assumptions. The first assumption was that the orders that a regulator or a court might impose would be prohibitions requiring that certain behaviour should cease. The second assumption was that the regulators and courts would not be able to find any behaviour of any individual competitor that could be identified as anti-competitive or inappropriate to which such orders might attach. These assumptions are unduly narrow and consequently amount to a straw man argument. Of course it would be absurd for a court to order one or more competitors to make market decisions without regard for the behaviour of other participants in that market – whether they are other competitors or customers. It would be equally absurd for a court to order a competitor to ignore its knowledge, if any, of current price levels in a market or to set their prices at levels that are materially different.

Drawing on the precedents in the *Access Directive*\textsuperscript{981} a regulator or a court in the European Union could, instead, impose positive obligations on the competitors in a tight oligopoly, without being concerned whether the market is characterised by collective dominance. For example, the competitors might be required:

- to permit competitors to have access to infrastructure on fair and reasonable terms that provide a risk-adjusted commercial return;\textsuperscript{982}
- to be transparent in their wholesale terms and conditions, including pricing;\textsuperscript{983} and

\textsuperscript{978} Filippelli (2013), op.cit., 290
\textsuperscript{979} Ibid
\textsuperscript{980} “...it is close to impossible to devise a judicially enforceable remedy for ‘interdependent’ pricing. How does one order a firm to set its prices without regard to the likely reactions of its competitors?” Clamp-All Corp. *v.* Cast Iron Soil Pipe Inst., (1988) 851 F.2d 478, 484 per Breyer, J (1st Cir. 1988)
– to impose obligations for cost orientation of prices and for various types of cost accounting systems.\textsuperscript{984}

It might be argued that this level of market intervention will mean that regulation is likely to become a permanent feature of such tightly oligopolistic markets and that the long-held and cherished view that markets – and telecommunications markets in particular – should over time move from special sectoral regulation to being governed by general competition law that applies to the economy as a whole, might have to be abandoned.\textsuperscript{985} As set out in Chapter 7, telecommunications markets are persistently oligopolistic and therefore continue to raise issues about their ability to become sustainably competitive in the absence of regulatory intervention.\textsuperscript{986}

Against this, it might be argued that between 2002 and 2007 the European Commission was able to considerably reduce its list of telecommunications markets that were appropriate for NRA ex-ante regulation.\textsuperscript{987} Only one retail market was retained in the 2007 list.\textsuperscript{988} It is likely that some other markets will become competitive as a result of convergence resulting in inter-model competition,\textsuperscript{989} but what is looking less likely is that the list will disappear altogether in the medium to longer term future.

If oligopoly is bound to continue in any case, it cannot be an argument against tight oligopoly regulation that it reduces the prospects of ceasing ex-ante regulatory control in favour of ex post competition law approaches. Encouraging a move from ex-ante regulation to ex post regulation expresses a preference for the application of general

\textsuperscript{983} Ibid, amending Article 9 of the Access Directive
\textsuperscript{984} Ibid, amending Article 13(1) of the Access Directive
\textsuperscript{985} BEREC (November 2015) op.cit., 11. BEREC cites the Deutsche Telekom (DT) response which expresses “the transitory nature of ex-ante regulation” which DT considers would be undermined with the introduction of a tight oligopoly approach, because telecommunications has a tendency to tight oligopoly. BEREC’s response is to confirm its commitment to the removal of ex-ante regulation, rather than to extend it: “…it is worth reflecting on whether a tight oligopoly can be deemed to lead to a situation of effective competition (this being the line that separates out markets that require to be regulated on an ex-ante basis from markets where ex-ante regulation is no longer necessary) or not. Therefore, BEREC does not out into question the temporary nature of ex-ante regulation, for so long as the conditions set for removal of ex-ante regulation (existence of effective competition) are really present.”
\textsuperscript{986} Chapter 6, above footnote 591 and following
\textsuperscript{988} Access to the public telephone network at a fixed location for residential and non-residential customers: 2007/897/EC, Annex
\textsuperscript{989} An example is the Wholesale Broadband Access review undertaken in the UK by Ofcom in which many areas had competition between different kinds of networks (notably between cable television networks and copper or fibre based telecommunications networks) for the provision of fixed voice services. Ofcom dissected service areas into those serviced by up to two POs (Principal Operators) and those served by 3 or more POs for the purpose of market analysis. http://stakeholders.ofcom.org.uk/binaries/consultations/review-wba-markets/statement/WBA-Statement.pdf
economy-wide competition law over sector-specific regulation. However, if it turns out that regulation on a specific-sector basis, such as of telecommunications, is required on a continuing, non-transitional basis, then that clearly affects the policy preference. It is not an argument against tight oligopoly theory as such. If regulation based on tight oligopoly theory becomes generally accepted, what are the future prospects for collective dominance in telecommunications – and other – markets? Regulators might be expected to take the line likely to provoke the least resistance and which may well have evidentiary advantages. Although ex-ante intervention based on the Airtours criteria for collective dominance would be available – at least there is no reason to suppose otherwise - the recent history of collective dominance for the sector in the European Union is not promising. In fact, it is that history that has added weight to the need for direct oligopoly control.

Summary of conclusions

This summary of the main conclusions of this thesis indicates both how it fits into current developments in the law and literature relating to oligopoly regulation and where it has contributed to an extended understanding of the issues associated with oligopoly regulation. Reviewing the way the concept of collective dominance has developed as the main vehicle for oligopoly regulation and control, the following key conclusions emerge:

- The notion of explicit agreement formed the paradigm for examining market circumstances where cooperation and collusion was suspected but where the standard indicators associated with meetings, communication and documentation were absent.

- This paradigm proved to be a remarkably strong and persistent template for examining circumstances where outcomes were suggestive of cooperation or collusion, such as parallel pricing and other behaviour in a market.

- The paradigm had as a central feature the intentions of the competitors concerned and, therefore, analysis of market structure has been in terms of the opportunities and constraints that exist to shape future cooperation in their market behaviour. This might be regarded as a subjective view of the matter, even though intentions were typically inferred or imputed from circumstantial evidence, or from patterns derived from the experience of earlier cases.
However the paradigm with its central feature of intentionality did not satisfy the fundamental requirement of competition policy by delivering better competitive outcomes through improved efficiency in production, allocation and innovation associated with goods and services. It failed to do this because its application, through the criteria established in cases like *Airtours*, with associated high evidentiary standards, led potentially to significant levels of Type 2 errors (failing to identify collective dominance or false negatives) whilst trying to avoid Type 1 errors (incorrectly identifying collective dominance or false positives). This is demonstrated by the subsequent history of telecommunications cases in the European Union.

Alternative approaches have been considered such as tight oligopoly theory (now under review on the initiative of BEREC). Tight oligopoly theory has major issues to resolve, including suitably differentiating relevant criteria from those that would typically apply for finding collective dominance. In addition the boundary conditions in which tight oligopoly theory might apply are imprecise (and may even remain that way) and its role as an alternative or second string to collective dominance in the regulatory armoury is a source of contention and uncertainty.

The common feature of alternative approaches to oligopoly regulation, when compared to collective dominance, is that they seek to apply an “objective” test, having regard only to the circumstances of the market and not to the intentions or policy preferences of the competitors concerned.

The recent history of oligopoly regulation in the European Union suggests strongly that, however much simplicity and certainty might be desired by market participants and investors, no bright line or *per se* rules are possible. The apparently comprehensive and authoritative analysis by the court in *Airtours* indicated better than any other demonstration that a detailed and rigorous analysis of the market and its characteristics would be required by regulators making conclusions about collective dominance and tacit collusion. There appear to be no opportunity for shortcuts in this analysis, and therefore no room for simple, easy to apply analysis.
• The courts have taken oligopoly analysis into a cul de sac. It appears incapable of further case law development and evolution in the short term except with the assistance of legislation. Such legislation also will likely contain no bright line or per se rules, but may specify with relative clarity the factors that regulators need to weigh up in their consideration of objective approaches to oligopoly regulation. Courts may or may not arrive at the same point, but cannot be relied up to develop the law to any particular timetable, assuming they can do so at all from the cul de sac that collective dominance has become.

• Finally, resolution of the issues associated with oligopoly regulation are critically important for economic and social development, and becoming more so. In the case of telecommunications, the example of a persistently oligopolistic sector used in this thesis, the increasingly online character of social and economic transactions means that timing is also critical and the evolutionary development of case law will in all likelihood not deliver solutions for the issues in the timescale required.

Future research directions

European Union law has developed a very useful approach to addressing the risks of single dominance in a market. Unfortunately the strengths of that approach are not shared with the approach that has been developed around Article 102 of the TFEU for collective dominance as an approach to oligopoly regulation and for addressing issues associated with competition within oligopolistic markets. The case law suggests that in a specific sector such as telecommunications, and also in the wider economy, relatively clear cut cases that meet the high evidentiary threshold that has developed since 2002 will be identified as cases of collective dominance and attract appropriate remedies. But there will be many cases which may be not meet the threshold tests for collective dominance, notwithstanding that the outcomes are manifestly non-competitive market performance. This thesis has sufficiently demonstrated that to be the case.

Many of the sectors affected are likely to be highly capital intensive and intrinsically oligopolistic, such as telecommunications, and fundamental to the creation of the online society of the future and of the online economy that is clearly emerging. Fundamental sectors that have multiplying impacts throughout society and the economy should not be permitted to be inefficient or non-competitive. It is therefore inherently
unsatisfactory to have an approach to oligopoly control that relies on a single approach, collective dominance, that can only identify the most egregious and obvious cases and which is content to permit other situations to continue with poor performance and little or no regulation.

Future research therefore will need to concentrate on developing legislation that authorises regulatory action based on objective performance outcomes or the carefully analysed risk of certain types of non-competitive outcomes, irrespective of the way in which competitors might cooperate or behave to produce such outcomes. In other words, legislation is needed that authorises regulatory intervention on the basis of forecast market outcomes rather than forecast competitor behaviour based on current market structure. There may be no need to jettison collective dominance in the process. In clear-cut cases collective dominance may serve as the basis for intervention, and it is possible that collective dominance might always be assessed before alternative approaches are assessed. Whether regulators need two strings to their bow rather than one is a separate matter. They certainly need some means of more effectively addressing the complexities of oligopolistic markets than the relatively weak instrument that collective dominance has become.
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