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Market power

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1 Four concepts of market power

At the heart of the EC's current economic approach to competition law is the view that market power offers a helpful preliminary filter to identify the sources of competition problems. However, the identification of market power is problematic because only firms in perfectly competitive markets are unable to raise price (because any price increase by one firm will lead to consumers switching to another competitor who sells at a lower price), but since perfect competition is a hypothetical model, it means all firms have some market power.¹ This is why in the relatively competitive retail market for beer one

¹ In all markets, firms face a downward sloping demand curve, while in a perfectly competitive market the demand curve is flat.

brewer can comfortably advertise beer as 'reassuringly expensive' as a means of competing against others.² Since the brief of a competition authority is not to create perfect competition but to deter certain forms of behaviour that harm economic welfare, only 'significant' manifestations of market power fall within the ambit of competition law. However, even with this qualification, the meaning of market power remains elusive.

There are four ways to think about market power. The first equates market power with the ability to increase price (the neoclassical approach), the second equates market power with commercial power, the third sees market power as the ability to exclude rivals so as to gain the power to increase price, and the fourth sees market power as a formal jurisdictional test.³

The first draws upon economic considerations. To an economist, market power means the ability of a firm 'to price profitably above the competitive level'.⁴ And market power is a worry when it is both significant and durable.⁵ This approach has been accepted by the US courts: it is the 'reduction in output and elevation of price that has been the historic concern of antitrust'.⁶ However, market power is also a relative concept: the greater the power, the more harm the firm can inflict. Therefore certain infringements, like excessive or predatory pricing, are penalised only when the firm in question has significant market power, while other kinds of infringement, like anticompetitive distribution agreements, may be penalised even if the firm has less market power, provided it is able to cause damage to competitors or consumers. Different thresholds of market power apply depending on the infringement in question,⁷ and, as a rule of thumb, the number and the degree of anticompetitive risks posed increases with higher levels of market power.

A second way of defining market power is to inquire whether the firm has greater commercial power than others on the market. This approach sometimes finds its way into the discussion of certain contract law doctrines, like economic duress, where one party has a 'situational monopoly' over the other contracting party.⁸ For example, when a small basket-weaving company has a major contract to supply a large retailer and enters into a contract with a

² The beer in question is Stella Artois.

³ For more details on these four models, see G. Monti 'The Concept of Dominance' (2006) 2 *European Competition Journal* (Special Issue) 31.

⁴ D. W. Carlton and J. M. Perloff *Modern Industrial Organization* 2nd edn (New York: Harper Collins, 1994) p. 8.

⁵ G. Werden 'Demand Elasticities in Antitrust Analysis' (1998) 66 *Antitrust Law Journal* 363, 373-80.

⁶ *US v. Oracle Corporation* 331 F Supp 2d 1098, 1114 (2004).

⁷ L. A. Sullivan and W. S. Grimes *The Law of Antitrust: An Integrated Handbook* (St Paul, MN: West Publishing, 2000) pp. 26-7. This point was suggested by Advocate General Fennelly in *Compagnie Maritime Belge and Others v. Commission* [2000] ECR I-1365 para. 137, where he noted that some firms are 'super-dominant' in that they hold a 'position of such overwhelming dominance verging on monopoly' so that they are subject to 'particularly onerous special obligations'.

⁸ M. J. Trebilcock 'Economic Criteria of Unconscionability' in B. J. Reiter and J. Swan (eds.) *Studies in Contract Law* (Toronto: Butterworth, 1980).

transport firm to carry the baskets, the transport company is able to renegotiate a much higher price at the last minute, which the small company must accept in order to stay in business.⁹ Opportunistic behaviour is undesirable and there may be good moral and commercial reasons for controlling the distributor's behaviour, but this is not usually seen as a scenario that requires the intervention of competition law because, so long as the market for baskets and transport is competitive, there is no consumer harm. Nevertheless, as we will see below, the Community definitions of market power may be wide enough to encompass this kind of power also, because this definition reflects a concern about economic freedom, and a worry that a firm that has commercial power can harm the interests of others.

A third definition of market power, which we label post-Chicago, provides that a firm has market power when it is able to devise strategies that can harm rivals and so give it, in the future, the power to raise prices and reduce output.¹⁰ This approach is wider than the neoclassical definition, but it has the same aim: to penalise firms whose strategies can have undesirable economic effects. On the other hand, this definition is also related to the definition of market power taken by those wishing to safeguard economic freedom, because it focuses on the power to harm competitors. However, in contrast to the commercial power definition, the post-Chicago approach sees the power to harm competitors as a means by which the firm can subsequently gain power to harm consumers.

A fourth approach is to interpret market power as a jurisdictional concept. This has been applied in Article 81; for example, the Commission has stipulated that certain types of agreement are lawful provided the parties' market shares are below a given threshold. As we discuss more fully in section 7 below, when parties to a horizontal agreement like the *Métropole* joint venture have market shares below 10 per cent, the Commission may declare that the agreement does not restrict competition appreciably.¹¹ Market shares provide a relatively simple means to measure market power even though they are insufficient to provide an accurate picture. Therefore, to base a determination of legality upon market shares can lead to Type 2 errors, as inefficient behaviour is not punished. Conversely, the risk of anticompetitive harm when market shares are low is limited, so the savings in enforcement costs compensate the risk of Type 2 errors. Using market shares as a means to establish jurisdiction creates safe harbours so that firms below the relevant threshold know that certain prohibitions do not apply to them. The jurisdictional approach acknowledges that there may be market power below the level set

⁹ *Atlas Express Ltd v. Kafco (Importers and Distributors) Ltd* [1989] QB 833.

¹⁰ T. G. Krattenmaker, R. H. Lande and S. C. Salop, 'Monopoly Power and Market Power in Antitrust Law' (1987) 76 *Georgetown Law Journal* 241.

¹¹ Commission Notice on Agreements of Minor Importance which do not Appreciably Restrict Competition under Article 81(1) of the Treaty Establishing the European Communities [2001] OJ C368/13 para. 7(a).

by the safe harbour, but trades off under-enforcement for cheaper and more effective application of the law. As the Community has had little to say about substantive definitions of market power in the context of Article 81, we move to consider this concept in the framework of Article 82 and merger control, and then return to Article 81.

2 Dominance in EC competition law

In applying Article 82, and for most merger cases, the Commission must identify dominance. The way that the Courts have interpreted this notion allows us to understand what concept of market power prevails in EC competition law. Thinking about market power in the context of the meaning of dominance is also helpful because this concept is currently in transition: the Commission wishes to move away from the current emphasis upon commercial power and towards identifying dominance with substantial market power based on economic theories.¹² We begin with the seminal cases.

In *Michelin*, the Court held that Article 82 'prohibits any abuse of a position of economic strength enjoyed by an undertaking which enables it to hinder the maintenance of effective competition on the relevant market by allowing it to behave to an appreciable extent independently of its competitors and customers and ultimately of consumers'.¹³ This passage represents the standard test for dominance.¹⁴ The Court's reference to the ability to behave independently 'to an appreciable extent' is relevant for two reasons: first, because it means that Article 82 does not apply to the sort of market power that most firms have due to markets not being perfectly competitive; second, because total control of the market is unnecessary to identify dominance. As the Court in *Hoffmann-La Roche* explained, dominance

does not preclude some competition, which it does where there is a monopoly or a quasi-monopoly, but enables the undertaking which profits by it, if not to determine, at least to have an appreciable influence on the conditions under which that competition will develop, and in any case to act largely in disregard of it so long as such conduct does not operate to its detriment.¹⁵

Dominance indicates a degree of market power which is considerably greater than that of other firms on the market and which can be used to harm the economic freedom of other market players by excluding them from the

¹² DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses (December 2005), pt. 4.

¹³ Case 322/81 *Nederlandse Banden-Industrie Michelin NV v. Commission* [1983] ECR 3461

para. 30. This is an oft-repeated formulation: see also Case 27/76 *United Brands Co. v. Commission* [1978] ECR 207 para. 65; Case 85/76 *Hoffmann-La Roche v. Commission* [1979] ECR 461 para. 38.

¹⁴ Van Bael and Bellis *Competition Law of the European Community* 4th edn (The Hague: Kluwer Law International, 2005) p. 117.

¹⁵ *Hoffmann-La Roche* [1979] ECR 461 para. 39.

market. An antitrust authority less concerned with economic freedom would opt for a higher degree of dominance in order to safeguard the ability of large firms to act aggressively on the market in the pursuit of their interests. Thus, in the US the *Microsoft* court defined monopoly in the neoclassical way: 'a firm is a monopolist if it can profitably raise prices above the competitive level'.¹⁶ In fact if anyone's economic freedom is preserved by the US standard, it is the defendant's. As the Supreme Court put it: 'Congress authorised Sherman Act scrutiny of such firms only when they pose a danger of monopolization. Judging unilateral conduct in this manner reduces the risk that the antitrust laws will dampen the competitive zeal of a single aggressive entrepreneur.'¹⁷ The ECJ's definitions of dominance are not consistent with a neoclassical interpretation of market power, as the degree of dominance required to trigger the application of Article 82 is lower than that necessary to trigger the application of the comparable provision in the United States (section 2 of the Sherman Act).¹⁸

If dominance is not defined in a neoclassical way, the question remains whether the Community approach is about commercial power or strategic power in the post-Chicago sense. Answering this question is tricky because these two forms of market power overlap somewhat: both look to whether the firm in question is able to harm competitors. However, while commercial power is found as soon as this ability is identified, strategic power requires a second step: determining whether the harm in question would give the firm the power to raise prices. As matters stand, it seems more plausible to suggest that commercial power is the basis upon which market power is identified in the case law. This can be justified in three ways. First, in chapter 2 we saw that EC competition law has been premised upon the protection of economic freedom. Therefore, firms that have the power to undermine the economic freedom of others require control. Second, in chapter 6 we will see that the aim of some of the 'abuse' doctrines is to protect the economic freedom of other market participants, as such a definition of dominance which emphasises the commercial power of certain firms to harm the economic freedom of others is necessary. Third, the leading cases demonstrate an emphasis upon commercial power, or as John Temple Lang has put it, 'the ability to contain competition'.¹⁹

In *United Brands*, for example, the firm was found to be dominant in the market for bananas in part because of certain commercial attributes that competitors lacked: it owned several banana plantations and a fleet of ships to transport bananas from Latin America to Europe, so that it was not

¹⁶ *US v. Microsoft* 253 F.3d 34, 50 (DC Cir. 2001).

¹⁷ *Copperweld Corp. v. Independence Tube Corp.*, 467 US 752, 767-8 (1984).

¹⁸ G. J. Werden 'Competition Policy on Exclusionary Conduct: Toward an Effects-based Analysis?' (2006) 2 *European Competition Journal* (Special Issue) 53, 56; Monti 'Concept of Dominance' p. 48.

¹⁹ J. Temple Lang 'Some Aspects of Abuse of a Dominant Position in EC Antitrust Law' (1979)

3 *Fordham International Law Forum* 1, 12.

susceptible to strikes, and this guaranteed it 'commercial stability and well being'.²⁰ Moreover, its research and development projects designed to prevent the spread of illness in banana plantations and its work on increasing productivity were also deemed to point to dominance, as well as its procedures for quality control and advertising.²¹ These attributes suggest *United Brands* was efficient, but count against it as evidence of dominance. In addition, the Court rejected the significance of the fact that there was 'fierce' competition in the banana market because *United Brands* would be able to hold competitors off: its 'economic strength has thus enabled it to adopt a flexible overall strategy directed against new competitors establishing themselves on the whole of the relevant market'.²² The Court favoured this evidence and rejected the relevance of the losses *United Brands* was incurring during the time it carried out the acts that the Court characterised as abuse of dominance. The Court's approach is inconsistent with a neoclassical conception of market power and also with a post-Chicago perspective: dominance is found in the firm's commercial strength irrespective of market outcomes.

A similar approach can be found even in recent cases, for example in the Commission's decision that General Electric (GE) held a dominant position in the market of large jet engines.²³ The Commission noted that GE's market shares were twice as large as the next competitor. It then pointed out that certain commercial links made GE more powerful: GE had a finance arm (GE Capital) which could be deployed to foreclose rivals; loans could be offered to airlines in exchange for the lender buying GE aircraft.²⁴ GE also owned facilitated risky investments by GE in the engine sector.²⁵ GE also owned GECAS, an aircraft leasing company that bought 10 per cent of the world's aircraft. GECAS only bought GE-powered aeroplanes. The Commission reasoned that companies leasing planes from GECAS could be asked to use GE-powered aircraft for all their fleet.²⁶ The Commission boosts these findings with quotes from *Forbes* and *Fortune* magazines that show, with colourful language, that GE is a most successful company, and the Commission equates commercial success with dominance.²⁷ The same facts were considered by the US Department of Justice, but it saw no evidence of dominance. The DOJ emphasised the competition from GE's rivals which were investing in new products, and the fact that GE seemed to be losing ground to them. Moreover, the DOJ noted that GE's market shares were high because some years ago it had been successful in securing a contract to supply engines for the Boeing 737, the

²⁰ *United Brands* [1978] ECR 207 para. 81.

²¹ Similar considerations were also taken into account in *Hoffmann La Roche* [1979] ECR 461 para. 48.

²² *United Brands* [1978] ECR 207 para. 121.

²³ Case M.2220 *General Electric/Honeywell* [2004] OJ L48/1.

²⁴ *Ibid.* paras. 112-17.

²⁵ *Ibid.* para. 110.

²⁶ *Ibid.* paras. 121-39.

²⁷ *Ibid.* para. 167, quoting from *Forbes* ('Instead of selling engines, [Jack Welch] is selling power, since some clever financing helped GE win the business'); para. 117 (*Fortune*).

most successful aircraft in the world. If the sales from the contract were excluded, then GE's market share became less threatening (down from 51 per cent to 44 per cent).²⁸ The contrast between the evidence that the US and EC authorities consider relevant is telling. The Americans see the presence of rivalry and falls in market share as proof that the firm under scrutiny seems unable to reduce output and increase price. In contrast, the EC sees the commercial resilience of the firm in question, and its clever use of its comparative advantages to remain in the market, as proof of dominance. Dominance then is the power to affect the competitive process by limiting the economic opportunities of rivals.

However, in December 2005, the Commission signalled a change in direction in the framework of its reassessment of Article 82.²⁹ It suggested that henceforth dominance should be associated with 'substantial market power' (SMP) and identified in neoclassical terms as the power to reduce output and increase price.³⁰ If this policy shift is put into practice, it could have significant implications for the scope of application of Article 82 and the merger rules because findings of dominance would be fewer. It is unlikely, for example, that the Commission would be able to find dominance in the two major cases discussed above: *United Brands* and *General Electric*. In neither of those decisions did the evidence point to the power to reduce output and increase price; on the contrary the market was competitive.

Now we move on to consider how one would measure market power. The first thing that will strike the reader is that, while the Commission and Court have shunned a neoclassical definition of market power when defining dominance, the Community begins its analysis of market power using tools that are suitable to determine market power from a neoclassical perspective. This is so because the methodology we describe is standard in antitrust law and it affords the Commission the flexibility to look for commercial power.

3 Measuring market power

Theoretically there is a precise, direct way of measuring market power as understood in the neoclassical sense: the Lerner index.³¹ This measures the

²⁸ W. J. Kolasky 'Conglomerate Mergers and Range Effects: It's a Long Way from Chicago to Brussels' (speech, 9 November 2001, available at www.usdoj.gov/atr/public/speeches/9536.pdf).

²⁹ DG Competition discussion paper on Article 82, paras. 21–8.

³⁰ This concept has already become part of Community law in the field of electronic communications (Article 14(2) Directive 2002/21 on a Common Regulatory Framework for Electronic Communications Networks and Services [2002] OJ L108/33). Having equated SMP with dominance in that sector, the Commission's approach in the discussion paper on Article 82 is to restate the converse of that proposition: dominance means SMP for all economic sectors. This broadly follows the suggestion made in S. Bishop and M. Walker *The Economics of EC Competition Law* 2nd edn (London: Sweet & Maxwell, 2002) pp. 183–5.

³¹ A. Lerner 'The Concept of Monopoly and the Measurement of Monopoly Power' (1934) 1 *Review of Economic Studies* 157.

difference between the price at which a firm sells its goods and its marginal cost. The greater the difference between the two, the more market power. However, this approach has little practical value because marginal costs are difficult to calculate.³² Moreover, firms with market power may have high costs (as they face no competition, they may have few incentives to minimise production costs) and their prices will be just slightly above their inefficiently high costs, so the index underestimates their power. Instead, an indirect method is used to measure market power, based upon a calculation of the firm's market shares and of barriers to entry. According to this approach, if a firm has very high market shares and entry for new competitors is blocked (say government licensing regulations limit the number of competitors), then it holds market power because it is free to raise prices without fearing that its position may be undermined by new entrants.

A simple example will illustrate the operation and the potential controversies of measuring market power by this method: assume an ice cream seller in Hyde Park is the sole seller of strawberry flavoured ice creams. Does he have market power? It may be argued that he has a 100 per cent share of the market in strawberry flavoured ice cream in Hyde Park, holding an undisputed dominant position. The ice cream seller may retort that he competes against other ice cream sellers who supply other flavours, so that the relevant market is that for all flavours of ice cream. In this wider market his market share is likely to be much less than 100 per cent. He might go further, and argue that consumers are looking for refreshment, thus chilled drinks would also be substitutes for ice cream, reducing his market share even further. Moreover, he might argue that Hyde Park is surrounded by a number of streets with numerous shops, many selling ice cream of all flavours, thus consumers are free to leave the park momentarily (there being no entry charges) and find cheaper ice cream. All these observations serve the same purpose: widening the definition of the relevant market so as to diminish the defendant's market share. Moreover, he can also argue that there is nothing stopping a new business entering the park and selling strawberry ice cream. These observations suggest that entry into the market is easy, so that he has no market power, because a price increase on his part will invite other competitors and bring prices down again.

This example demonstrates that the identification of market power is intimately connected with how we define the market. It also synthesises the dynamics of litigation over market definition. First, the party enforcing the law opts for a narrow product and geographical market (strawberry flavoured ice cream sold in Hyde Park, giving the defendant a market share of 100 per cent), while the defendant tries to widen the market so as to reduce the chances of being found dominant (all refreshments sold in Hyde Park and the vicinity,

³² For detailed analysis, see W. M. Landes and R. A. Posner 'Market Power in Antitrust Cases' (1981) 94 *Harvard Law Review* 937, 939–43.

whereby the market share would dwindle to insignificance). In economic jargon, a market is defined by reference to *demand* substitutability (what other goods and what other locations people think are in the same market as the defendant) and *supply* substitutability (which producers could easily switch to sell the same products as the defendant or move into his geographical area). Having established an agreed market and a share of that market, the next question is whether that market share is stable, or whether the market is so contestable that even with a large market share the defendant is unable to monopolise – this is a question of *entry barriers*. If it is easy for new ice cream sellers to enter the market, then the market shares do not tell the full story, for the market power they represent is temporary and likely to evaporate as soon as that power is exploited. Having sketched the issues, we turn to consider how the law applies economic insights to determine market power. First we consider the process of market definition (sections 3.1 and 3.2), then the role of market shares (section 3.3) and finally entry barriers (section 3.4).

3.1 Market definition: the hypothetical monopolist test

The leading market definition test was first incorporated in the US Merger Guidelines in 1982, and now forms part of the approach deployed by the EC Commission. Applied to the ice cream example above, the test asks: if the defendant has a hypothetical monopoly in the strawberry flavoured ice cream market in Hyde Park, would he be likely to 'impose at least a "small but significant and nontransitory" increase in price, assuming the terms of sale of all other products are held constant'?³³ If the answer is yes, the relevant market is that of strawberry flavoured ice cream sold in Hyde Park because a price rise would be profitable. If the price rise would not be profitable, because most consumers would switch to other fruit flavours or leave the park and buy strawberry flavoured ice cream in the vicinity, the test is repeated by widening the market, say all fruit flavoured ice cream sold in Hyde Park and its vicinity, and considering whether a hypothetical monopolist of fruit flavoured ice cream would be able to increase the price; if not, the market is widened again, by adding the next best substitute, say all ice cream flavours, and asking the same question. This process continues until we find a market where a hypothetical monopolist would be able to raise the price of the product profitably. As a general simplification, the question the hypothetical monopolist test asks is this: *is this a market worth monopolising?*³⁴

It is important to bear in mind that the hypothetical monopolist test will not usually be applied directly; rather it is a 'conceptual tool' that allows one

³³ Department of Justice and Federal Trade Commission *Horizontal Merger Guidelines* (1992, revised 1997) para. 1.0 (in the jargon this is known as the hypothetical monopolist test or the SSNIP test – small substantial, non-transitory increase in price).

³⁴ Bishop and Walker *Economics* pt 4.05.

to assess the empirical evidence that is available.³⁵ US antitrust authorities commonly ask customers (e.g. the strawberry ice cream eating public) directly how they would respond to price increases, thereby identifying the next best substitute.³⁶ Other empirical evidence may include the following: own price elasticity (which is a measure of the change in the quantity of the firm's product demanded following a small price increase – the greater the decrease in quantity demanded the less likely that the product is in a market all of its own); cross-price elasticity of demand (which measures how a change in the price of one good affects demand for another); and price correlation studies (which assess the price changes of goods over time, and suggest that two products are in the same market if the prices change with the same rhythm).³⁷ Some examples can help put some flesh on these approaches.

In *Kraft* a US court had to determine whether the 'adult' variety of ready-to-eat breakfast cereal was a separate market from children's ready-to-eat cereals. The court reviewed a number of empirical studies on the purchasing patterns of cereals and noted that there was no evidence of a separate market. Instead consumers readily substituted along the whole spectrum of cereals offered, and the Court concluded, relying on cross-elasticity of demand studies, that: 'Any substantial price increase for any one type of ready to eat cereal would lead to significant demand-side substitution of many other ready to eat cereals.'³⁸

In *Nestlé/Perrier* the Commission decided that mineral water was a distinct market. In part it relied on price correlation studies which indicated that there was no relationship between the prices of mineral waters and those of soft drinks – at one point the former were rising and the latter falling but there was no marked effect on consumption. The Commission concluded: 'This price evolution seems to indicate that even strong and sustained reductions of soft drink prices in real terms would not force source water suppliers to also reduce their own prices, nor would it affect their ability to increase them.'³⁹

In *Kimberly-Clark/Scott* the Commission reasoned that private label and branded tissues were in the same market on the basis that the price correlation was significant and that consumers switched between them when there were promotional campaigns.⁴⁰

³⁵ P. Crociani 'The Hypothetical Monopolist Test: What it Can and Cannot Tell You' [2002]

European Competition Law Review 353, 355.

³⁶ J. Langerfeld 'The Merger Guidelines as Applied' in M. Coates and A. Kleit (eds.) *The Economics of the Antitrust Process* (Boston: Kluwer Academic Publishers, 1996) pp. 43–5.

³⁷ For a more detailed explanation, see M. Motta *Competition Policy* (Cambridge: Cambridge University Press, 2004) pp. 106–10; J. Church and R. Ware *Industrial Organization – A Strategic Approach* (Boston: Irwin McGraw Hill, 2000) ch. 19.

³⁸ *State of New York v. Kraft General Foods Inc.* 926 F Supp. 321, 333 (1995).

³⁹ Case IV/M.190 *Nestlé/Perrier* [1992] OJ L356/1 paras. 13 and 16.

⁴⁰ Case IV/M.623 *Kimberly-Clark/Scott* [1996] OJ L183/1 para. 48.

The hypothetical monopolist test is not designed to give the absolutely correct answer to the market definition question. Inherent in its operation are a number of arbitrary choices. For instance, why choose a 5 per cent price increase, and not a higher or a lower one?⁴¹ Which products do we begin our analysis with? What geographical market do we start with? Nevertheless, by asking the same questions for each case, whether about ice cream or sophisticated computer software, or the services offered by accountancy firms, the test yields consistency.⁴²

One specific criticism of this test is that markets are defined too widely when, at the time the hypothetical monopolist test is applied, the firm under investigation already has market power in the neoclassical sense; that is, it can raise prices well above cost. In the jargon, this is known as the 'cellophane fallacy', after the Supreme Court decision in *du Pont*.⁴³ The Government had charged *du Pont* with monopolising the cellophane market. However, the Court found that the relevant market was wider than cellophane and included a range of other wrapping materials, and it held that *du Pont* had no monopoly power. This was based upon observations that consumers replaced cellophane with other products – a high cross-elasticity of demand. However, the consensus among economists is that the Supreme Court was wrong because it carried out its analysis of cross-elasticity at a time when *du Pont* was selling its cellophane at a monopoly price and, of course, at that high price consumers would switch to other products given a further increase because the monopolist would already have set prices at a level where further price increases would cease to be profitable. The cross-elasticity test should have been carried out when *du Pont* was pricing competitively and checks made to see whether a small increase above the competitive price would have led to consumers switching – asking if consumers would have switched if there was a small increase in monopoly price would of course have led to many more consumers switching. The US Guidelines attempt to avoid making this error by using a competitive price when the circumstances in the market lead to suspicion that current prices are inflated by the presence of market power.⁴⁴

Overall, the advantage of the hypothetical monopolist test is that it provides for a consistent and predictable framework – although each market definition analysis remains intimately fact specific. The Commission had begun to use this methodology under the Merger Regulation, and in 1997 it published a Notice

on the Definition of the Relevant Market for the Purposes of Community Competition Law⁴⁵ which indicated its increased willingness to deploy the hypothetical monopolist test in all competition cases.⁴⁶ In what follows we assess how this approach contrasts with that which was originally taken by the EC.

3.2 Market definition in EC competition law

3.2.1 Product market definition

The early case law placed little reliance on economic assessment of the relevant market, as evidenced by the notorious *United Brands* decision, where the banana market was identified as a relevant market distinct from other fresh fruits.⁴⁷ The Court used a mixture of controversial criteria to come to this conclusion. First, it noted that a distinct group of consumers – the young, the old and the sick – would not find other fruits equally substitutable, because for them the banana was an easier fruit to eat. This is erroneous for there was no evidence that *United Brands* would be able to target this particular group of consumers with higher prices – they and all other consumers shop in the same place, thus the market for those consumers is not one worth monopolising because it is logistically impossible to do so. Second, *United Brands* also encapsulated a qualitative set of criteria for defining the relevant market, encompassing products considered interchangeable because of their characteristics, price and interdependence.⁴⁸ In the case of bananas these are: 'softness, seedlessness, ease of handling and regular availability'. There is a risk that this standard allows one to add infinite descriptive words before a noun to create narrow markets (e.g. organic, seedless, preservative-free, home-made strawberry ice cream). Finally, the Court also took into consideration econometric evidence to consider whether the bananas competed with other fruit. On this point, there was some controversy over the weight given by the econometric studies which were relied upon: according to the defendant, these showed that other fruits competed with bananas, while the Court considered that the studies demonstrated that the competition was not sufficiently intense to place bananas in a wider market.⁴⁹ Overall, the problem with

⁴⁵ [1997] OJ C372/5.

⁴⁶ There is nothing to prevent the test from applying only to mergers. See G. J. Werden, 'Market Delineation under the Merger Guidelines: Monopoly Cases and Alternative Approaches' (2000) 16 *Review of Industrial Organization* 211, citing *Coastal Fuels of Puerto Rico Inc. v. Caribbean Petroleum Corp.* 79 F.3d 182 (1st Cir. 1996), where the hypothetical monopolist test was applied in a monopolisation case to identify the relevant geographical market. See also *US v. Kodak* 63 F.3d 95 (1995).

⁴⁷ [1978] ECR 207.

⁴⁸ Market Definition Notice, para. 8. See also *Hoffmann-La Roche* [1979] ECR 461 para. 24; Case M-580 *ABB/Daimler-Benz* [1997] OJ L11/1 para. 13.

⁴⁹ Some argued that in the summer months bananas were more easily replaceable with other fresh fruit: W. C. Baden Fuller, 'Article 86 EEC: Economic Analysis of the Existence of a Dominant Position' (1979) 4 *European Law Review* 423.

⁴¹ Some think 5 per cent is too high: R. Pitofsky 'New Definitions of Relevant Market and the Assault on Antitrust' (1990) 90 *Columbia Law Review* 1805, 1824.

⁴² W. F. Baxter 'Responding to the Reaction: The Draftsmen's View' (1983) 71 *California Law Review* 618, 624.

⁴³ *US v. El du Pont de Nemours & Co.* 118 F. Supp. 41 (D. DE 1953) aff'd 351 US 377 (1956). For a detailed examination, see Bishop and Walker *Economics* pts 4.34–4.43.

⁴⁴ US Merger Guidelines para. 1.1.1. The EC Notice on the Definition of the Relevant Market for the Purposes of Community Competition Law [1997] OJ C372/5 recognises this problem (para. 19) but does not resolve it. However, determining what a competitive price might be is controversial (see Crocioni 'Hypothetical Monopolist Test', p. 359, and ch. 7 pp. 218–20).

the *United Brands* approach was that the Court did not establish a clear methodology and at its centre rested a number of subjective considerations, with the risk of inconsistent decisions.⁵⁰

In contrast, the 1997 Market Definition Notice places the quantitative, hypothetical monopolist test discussed above at the centre of the assessment of the relevant product market, relegating the qualitative criteria to an initial stage to limit the field of investigation.⁵¹ The test draws very closely upon the US Merger Guidelines:

The question to be answered is whether the parties' customers would switch to readily available substitutes or to suppliers located elsewhere in response to a hypothetical small (in the range 5% to 10%) but permanent relative price increase in the products and areas being considered. If substitution were enough to make the price increase unprofitable because of the resulting loss of sales, additional substitutes and areas are included in the relevant market. This would be done until the set of products and geographical areas is such that small, permanent increases in relative prices would be profitable.⁵²

However, the kind of evidence that the Commission will consider in order to carry out the hypothetical monopolist test is not always convincing.⁵³ On the one hand, the Commission looks at past evidence of substitution between products, and is also open to a variety of econometric and statistical approaches (e.g. cross-elasticity and price correlation studies, which we have explained above),⁵⁴ as well as marketing studies that have been carried out prior to the investigation and which seek to identify consumer preferences. Moreover, the Commission will look at switching costs that consumers may face (e.g. switching from one software product to another may be costly as files cannot easily be transferred to work on the new software package).⁵⁵ On the other hand, the Commission also considers the views of competitors and customers. The evidence of these groups is not always reliable – often they will offer evidence that supports their interests in the resolution of the dispute (e.g. competitors might fear the efficiency of a merger and want the transaction blocked). The limits of consumers' views were recently exposed in an American case. The US Department of Justice argued that only three firms were present in the market for certain computing services, and lined up a number of highly sophisticated business managers to testify that they saw the market in the same

⁵⁰ For instance, the Commission concluded that cola flavoured soft drinks are in a separate market from other soft drinks (Case M.794 *Coca-Cola/Amalgamated Beverages* [1997] OJ L218/15), but home storage products (food and non-food) are in the same product market (Case M.1355 *Newell/Rubbermaid* (13 January 1999) para. 11).

⁵¹ Market Definition Notice paras. 15–19, 36. ⁵² *Ibid.* para. 17. ⁵³ *Ibid.* paras. 38–42.

⁵⁴ See Case M.1524 *Airtrous/First Choice* [2000] OJ L93/1 para. 22 for a more recent example.

⁵⁵ E.g. Case M.1671 *Dow Chemical/Union Carbide* [2001] OJ L245/1 para. 27, where the Commission reports the results of a SSNIP test and notes that the reasons consumers gave for not switching if prices rose were high costs of adapting the production process to use a different product, or technical inability to switch to other products.

way, but the court rejected their views because they only represented the consumers' preferences and none of the witnesses explained how they would react if the firms in question raised prices by 10 per cent. The court went on to explain the limited value of consumers' views: 'customer testimony of the kind plaintiffs offered can put a human perspective or face on the injury to competition that plaintiffs allege. But unsubstantiated customer apprehensions do not substitute for hard evidence.'⁵⁶ In contrast to this detailed scrutiny of the value of consumer views, the Commission Notice indicates that there is no 'rigid hierarchy of different sources of information or types of evidence'.⁵⁷ This is unfortunate as the quality of evidence can often be related to its source.

After the publication of the Market Definition Notice, we might expect that reasoning like that in *United Brands* would not be repeated. The broadly comparable *Danish Crown* case suggests this is the case. It concerned a merger of two Danish farmers' cooperatives and the question arose whether beef, pork, veal, sheep, lamb and poultry were part of a fresh meat market or whether each type of meat was in a different market, in particular whether beef and pork were in separate markets. While we find comments analogous to those in *United Brands* (namely that consumers perceive these meats differently on the basis of attributes such as flavour, taste, nutritional value, tenderness, cost, ease of use),⁵⁸ these criteria are backed up by considerable empirical evidence (e.g. information from wholesalers and supermarkets about consumer demand, and data about consumer preferences). Moreover, the Commission carried out a hypothetical monopolist test asking buyers whether a 5–10 per cent increase in the price of pork or beef would lead them to buy other meats. The replies received from caterers, wholesalers and supermarkets indicated that there was only a slight degree of substitution between the different types of meat.⁵⁹ In addition, the Commission relied upon data showing that the price elasticities for pork and beef were low, indicating that the price of one meat did not affect consumption of other meats significantly.⁶⁰

In addition to a new methodology, one element of the *United Brands* test has been *de facto* overruled – the reference to the fact that certain customers prefer one product to another. According to the Market Definition Notice, if a product has no substitutes for a group of individuals the Commission will consider that there is a separate market only when such a group can be subjected to price discrimination,⁶¹ thus reacting directly to the economic criticism levelled against *United Brands*. This novel approach is visible in *Danish Crown* where sales of meat to caterers (restaurants, canteens and government offices) were treated as a different market from that for sales of meat to retail outlets (supermarkets and butchers). This distinction was justified on a number of grounds: for caterers the origin of the meat is less

⁵⁶ Oracle 331 F Supp 2d 1098, 1131 (2004).

⁵⁷ Market Definition Notice para. 25.

⁵⁸ Case M.1313 *Danish Crown/Vestjyske Slagterier* [2000] OJ L20/1 para. 24.

⁵⁹ *Ibid.* para. 26. ⁶⁰ *Ibid.* para. 29. ⁶¹ *Ibid.* para. 43.

important (there have been more imports of meat from other EU countries by caterers); no arbitrage is possible between the two buyers because distribution and packaging is different (e.g. meat sold to supermarkets is already cut and packaged with all the information the consumer needs); retailers need to buy all kinds of meat so as to offer clients diverse cuts, while caterers tend to buy larger quantities of one cut of meat.⁶² Accordingly, the catering market and the retail market are both worth monopolising separately, as the sales to one kind of customer are distinct from those to another.

In spite of these advances, some have criticised the Market Definition Notice for containing an unfortunate mix of old-style subjectivity (based on product characteristics) and modern economic analysis.⁶³ Moreover, in certain cases the Commission has retained an emphasis on qualitative criteria.⁶⁴ For instance in *Volvo/Scania*, while the Commission relied on sophisticated economic analysis to define the relevant geographical market, it defined the relevant product much more superficially: it distinguished between '5-16 tonne trucks' and '16 tonne and over trucks' on the basis that these were physically different, but paid no heed to the question of whether the consumers of the larger trucks might consider buying more smaller trucks if the price of the heavier ones rose, nor did it examine possible supply substitutability between the two sizes of trucks.⁶⁵ Thus, flexibility is preferred over consistency in approach: while quantitative methods are used, the trend is to use a mixture of qualitative (product characteristics, price, intended use) and quantitative evidence in determining the relevant market.

The Commission's focus, both in its case law and in the Notice, is on *demand* substitution. Less attention is paid to the reaction of other firms.⁶⁶ The Commission distinguishes between supply substitution whose effects are equivalent to those of demand substitution in terms of effectiveness and immediacy and supply substitution that takes longer to materialise.⁶⁷ The former is incorporated into the relevant market definition, the latter is taken into account only at a second stage to determine whether there are entry barriers (see section 3.4 below).⁶⁸ A more precise approach is taken in the

US Guidelines – potential competitors are considered as participants in the relevant market if, in response to a small but significant and nontransitory price increase, they can enter the market 'within one year and without the expenditure of significant sunk costs of entry and exit'.⁶⁹ Supply responses that do not meet these two criteria are assessed at a second stage when determining entry barriers into the relevant market. Accordingly, the US approach uses the hypothetical monopolist test also to define supply substitutability. Although some might take the view that supply substitutes should be considered more fully when determining the relevant market,⁷⁰ the important issue is that competitive constraints from supply substitutes are taken into account at some point in the inquiry, and whether this occurs at the stage of market definition or at a second stage, or – as is the case now – partly when defining the market and partly at the entry barrier stage, the economic analysis of market power and the legal result will be comparable.⁷¹ Nonetheless, the distinction in the Notice is unsatisfactory in its reference to potentially arbitrary criteria of immediacy and effectiveness.

3.2.2 Geographical market

A geographical market comprises an area where the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.⁷² As with the product market, the Commission Notice indicates that the hypothetical monopolist test can be applied, considering whether customers would switch to other geographical markets should there be a price increase.⁷³ A range of considerations can affect the application of the hypothetical monopolist test, principally the costs of transport: a market is worth monopolising when transportation costs from outside the region are high relative to the price of the product; accordingly the market for aircraft is justifiably global,⁷⁴ while markets for perishable products tend to be narrower given the increased costs of transport involved.⁷⁵ Consumer preferences are

⁶⁹ US Horizontal Merger Guidelines para. 1.32.

⁷⁰ See Bishop and Walker *Economics* para. 4.58; *Motta Competition Policy* pp. 104–5, arguing that if there is a presumption of market power based on market shares, it is not easy to displace this when assessing ease of entry.

⁷¹ One difference is where the application of a Block Exemption depends exclusively upon market shares, then here the failure to include supply substitutes may disqualify a firm from the benefit of the Block Exemption, even though it may lack market power. See further ch. 10.

⁷² Market Definition Notice para. 8.

⁷³ *Ibid.* paras. 16–17. So the criticism that the Commission adopts a different approach for geographical market definition (*Camesasca and van den Bergh 'Achilles Uncovered'*) is erroneous.

⁷⁴ *Boeing/MDD* [1997] OJ L336/16.

⁷⁵ For example, glucose syrups and blends need to be kept at a constant high temperature to avoid crystallisation, the costs of transport are significant and the logistic issues are important; accordingly certain markets are national or regional: Case IV/M.2502 *Cargill/Cerealia*, 18 January 2002, para. 17.

⁶² *Ibid.* n. 30 para. 38.

⁶³ P.D. Camesasca and R.J. van den Bergh 'Achilles Uncovered: Revisiting the European Commission's 1997 Market Definition Notice' [2002] *Antitrust Bulletin* 143, 158; J. Faull and A. Nikpay *The EC Law of Competition* (Oxford: Oxford University Press, 1999) para. 4.146.

⁶⁴ For example, in the same year the Commission did not apply the SSNIP test in *Virgin/British Airways* [2000] OJ L301 but did so in *1998 Football World Cup* [2000] OJ L59/5.

⁶⁵ Case M.1672 *Volvo/Scania* [2001] OJ L143/74.

⁶⁶ Curiously, in one of the few cases the Commission lost on market definition, it was criticised for failing to identify supply substitutes: Case 6/72 *Europemballage Corp. and Continental Can Co. Inc. v. Commission* [1972] ECR 215. For criticism, see Bishop and Walker *Economics* paras. 4.26–4.32.

⁶⁷ Market Definition Notice paras. 20–3. In Case IV/M166 *Torrax/Sorrio* (24 February 1992) the Commission speculated that supply substitution between two types of paper was easy (para. 18).

⁶⁸ For criticism on the practicality of this distinction, see Camesasca and van den Bergh 'Achilles Uncovered' pp. 159–62.

also relevant, as are language considerations in the case of broadcasting markets.⁷⁶ For certain consumer goods, when on-line purchasing is not an option, it is probable that markets are local and cover only a small territory.⁷⁷

The geographical size of the market increases with deeper legislative integration by the EU: 'The measures adopted and implemented in the internal market programme to remove barriers to trade and further integrate the Community markets cannot be ignored when assessing the effects on competition of a concentration or a structural joint venture.'⁷⁸ This observation is evidenced by the *Pirelli/BICC* merger decision where the liberalisation of the electricity markets meant that utility companies now source their requirements outside their Member States – thus a merger between two Italian firms producing power cables had a wider geographical dimension than Italy for, post liberalisation, the competitive constraints arose from other Member States.⁷⁹ However, barriers to trade may remain in spite of Community legislation and this will reduce the geographic scope of the market. Thus in *Volvo/Scania* one reason why the market for trucks was found to be regional and not EC-wide was because technical regulations for trucks differed among the Member States, meaning that a purchaser operating a truck from Sweden could not buy a truck from another Member State where the technical specifications were incompatible with those in Sweden. In this case, EC directives designed to harmonise technical specifications had not been successful in integrating the market.⁸⁰

One general criticism of the geographical market definition is that often the focus is on the regions where the infringement of competition law takes place – thus when Michelin (a firm that has a global presence) was accused of abusing a dominant position in the Belgian market, little analysis was carried out to determine competitive pressures from outside the border.⁸¹ In contrast, when a joint venture agreement between Michelin and Continental was reviewed, the Commission had no qualms in identifying a European market, and at times even referred to the tyre market as a global one.⁸² Some see nothing problematic with this and suggest that in cases of restrictive practices the focus is on the market where the firm 'may be able to engage in abuses which hinder effective competition',⁸³ while in cases of mergers or joint ventures the area is that where the firms are 'involved in the supply and demand of the products or services' concerned.⁸⁴ Accordingly, 'the definition of the relevant geographic market must ... take into account the geographic scope of the conduct

⁷⁶ E.g. *Berlethmann/Kirch/Premiere* [1999] OJ L53/1 para. 22.

⁷⁷ E.g. *M. E. Burgess, J. I. Burgess and S. J. Burgess (trading as J. I. Burgess & Sons) v. Office of Fair Trading* [2005] CAT 25 (funeral services).

⁷⁸ Market Definition Notice para. 32. ⁷⁹ Case M.1882 *Pirelli/BICC*, 19 July 2000.

⁸⁰ *Volvo/Scania* [2001] OJ L 143/74 para. 56. ⁸¹ Bishop and Walker, *Economics* para. 4.70.

⁸² *Continental/Michelin* [1988] OJ L305/53 paras. 19 and 5 respectively.

⁸³ *United Brands* [1978] ECR 207 para. 44.

⁸⁴ Article 9(7) Council Regulation (EC) No. 139/2004 of 20 January 2004 on the Control of Concentrations between Undertakings [2004] OJ L24/1.

in question'.⁸⁵ While doctrinally accurate, this approach can be challenged – if Michelin chooses to abuse its considerable market power in Belgium, it is legitimate to ask whether it is possible for competitors in other markets to enter the Belgian market, or for buyers of its tyres to exit Belgium and purchase elsewhere. Merely because under Articles 81 and 82 one is often judging the legality of past behaviour, this does not mean that an analysis of the consumers' options is irrelevant. A static approach that defines the geographical market merely by identifying the area where the practice takes place can lead to unnecessarily narrow market definitions.⁸⁶

3.2.3 Policy-driven market definition

From a litigation perspective, the party alleging an antitrust infringement usually advocates a narrow market definition to maximise the defendant's market power. The reason market definition is so highly contested is because if the Commission is successful with its market definition, the defendant is likely to lose on the merits, especially in cases of abuse of dominance where many practices are banned outright when carried out by a dominant firm, and in mergers, where a finding of dominance often creates a presumption that the merger is anticompetitive. But there is another possible motivation for narrow market definition – the accomplishment of public policy aims – and sometimes one can see the enforcer's policies at play when markets are being defined.⁸⁷ Consider for example media pluralism.⁸⁸ This is normally safeguarded under national legislation: in Germany, for example, media mergers are scrutinised by the Commission for the Establishment of Concentration in the Media,⁸⁹ and in the UK special rules apply to mergers in the media sector, because the Government does not believe that reliance on general competition law is sufficient to protect pluralism.⁹⁰ Moreover, under the Merger Regulation, Member States are allowed to take appropriate measures to protect the plurality of the media even if the merger has a Community dimension.⁹¹ In the 1990s attempts were made to regulate media ownership at Community level, with the Commission being of the view that 'the single market cannot be

⁸⁵ L. Ritter, W. D. Braun and F. Rawlinson *European Competition Law: A Practitioner's Guide* 2nd edn (The Hague: Kluwer Law International, 1999) p. 37.

⁸⁶ See T. E. Kauper 'The Problem of Market Definition under EC Competition Law' (1997)

20 *Fordham International Law Journal* 1682, 1690, noting that the US courts apply a dynamic approach which leads to wider markets.

⁸⁷ In a similar vein, see *ibid.* For an additional set of examples, see G. Monti 'Article 82 and New Economy Markets' in C. Graham and F. Smith (eds.), *Competition, Regulation and the New Economy* (Oxford: Hart Publishing, 2004).

⁸⁸ See generally M. Ariño 'Digital War and Peace: Regulation and Competition in European Digital Broadcasting' (2004) 10 *European Public Law* 135.

⁸⁹ See www.kek-online.de.

⁹⁰ Section 58 Enterprise Act 2002. Quite how to safeguard pluralism effectively is a matter of debate. See E. Barendt 'Structural and Content Regulation in the Media: UK Law and Some American Comparisons' (1997–8) III *Yearbook of Media and Entertainment Law* 75.

⁹¹ Article 21(4) Regulation 139/2004.

put into practice at the expense of pluralism'.⁹² This initiative failed through a mix of difficulties, ranging from questions about the EC's legislative competence and divisions among the EC institutions to political foot-dragging.⁹³ However, as Levy notes, the Commission's appraisal of media mergers which escape the clutches of national laws and are analysed under the Merger Regulation has defended media pluralism, possibly beyond what any directive on media ownership could have achieved.⁹⁴

The relationship between market definition and pluralism can be seen in the Commission's definition of pay-TV markets as separate from free-to-air TV because the Commission was concerned with ensuring that the consumer is able to choose between more than one pay-TV platform. In *Bertelsmann/Kirch/Premiere* the Commission blocked a transaction where Kirch would increase its shareholding in Premiere (Germany's leading pay-TV supplier), and exit from the pay-TV market, leaving only one pay-TV platform. One of the Commission's concerns was that there would not be any programme platform competition left on the German market.⁹⁵ However, provided that other pay-TV operators are cleared to compete, mergers in the pay-TV market are allowed (for example, *Vivendi/Canal+/Seagram*).⁹⁶ These decisions rely on unconvincingly narrow market definitions, using methods that eschew the kind of economic analysis that the Commission has promised in its Market Definition Notice. In fact, the Commission noted that free-to-air TV exerts considerable competitive pressure on pay-TV: in the *BskyB/Kirch* and *NewsCorp/Telepiit* decisions, it was clear that free-to-air TV was one of the main reasons for the financial difficulties faced by the pay-TV firms under scrutiny.⁹⁷ Moreover, when the German regulator reviewed the *Bertelsmann/Kirch/Premiere* merger it felt that pay-TV was subject to sufficient competitive pressure from free-to-air TV.⁹⁸ However, by considering pay-TV as a separate market, it is then easy to find dominance, assuming that consumers will be hurt by the presence of only one pay-TV operator, and block the merger.

At times, it seems as if the media decisions on market definition are also affected more by concerns about the development of an industrial segment

than by the promotion of consumer welfare or of pluralism. For example, in the *Holland Media Group* case, the Commission said that in addition to creating a dominant position, the alliance 'could even be counterproductive to the development of digital TV in the Netherlands'.⁹⁹ This suggests that a mixture of pluralism and industrial policy considerations are in play. The concern over pluralism plays a significant role in these decisions and it was tacitly acknowledged by one Commission official's comments on *Bertelsmann/Kirch/Premiere*: 'new media cases ... tend to escape the traditional national legislation designed to control the media and assure pluralism, thus giving the Community, as an inherently Europe-wide mechanism, a central role'.¹⁰⁰

Market definition can be strategic in two ways: first, as a litigation strategy, it serves to facilitate a finding of market power; second, market definitions can give the competition authority the competence to achieve other public policy aims of Community interest. In the cases just reviewed, two policies are at play: safeguarding pluralism (however imperfectly)¹⁰¹ and enhancing the development of new technology. These can also be seen in the football broadcasting rights decisions we examined in chapter 4, where such rights are identified as a distinct market as a means to facilitate the growth of alternative media, like 3G and the Internet.¹⁰²

3.3 Market shares

Once the market is defined, the firm's market share in the relevant market can be calculated. Market shares are a proxy for market power, not a precise measure. In EC law, when it comes to determining whether a firm holds a dominant position for the purposes of applying Article 82, the Court has indicated that a market share of 50 per cent gives rise to a presumption of dominance,¹⁰³ and the case law suggests that a firm may dominate a market with market shares as low as 40 per cent.¹⁰⁴ In contrast, the US courts suggest that market shares of 70 per cent are enough to trigger the presumption of monopoly, and some courts have suggested that a market share of less than 50 per cent cannot confer monopoly power.¹⁰⁵ As we suggested earlier, the lower

⁹² Communication to Parliament and Council: Follow-up to the Consultation Process Relating to the Green Paper on 'Pluralism and Media Concentration in the Internal Market - An Assessment of the Need for Community Action' (COM(94)353 final) p. 7.

⁹³ See generally D. Levy *Europe's Digital Revolution* (London: Routledge, 1999) pp. 50-9; A. Harcourt 'Regulating Media Concentration: The Emerging Policy of the EU' (1996) 7

Utilities Law Review 202; G. Doyle 'From "Pluralism" to "Ownership": Europe's Emergent Policy on Media Concentrations Navigates the Doldrums' (1997) 3 *Journal of Information, Law and Technology*, http://ejl.warwick.ac.uk/jilt/commsreg/97_3doyl/.

⁹⁴ *Levy Europe's Digital Revolution* p. 98. ⁹⁵ [1999] OJ L53/1 paras. 66-7.

⁹⁶ Case M.2050 *Vivendi/Canal+/Seagram*, 13 October 2000.

⁹⁷ Case IV.37 *BskyB/Kirch*, 21 March 2000; Case M.2876 *NewsCorp/Telepiit* [2004] OJ L110/73.

⁹⁸ I. Nitsche *Broadcasting in the European Union: The Role of Public Interest in Competition Analysis* (The Hague: Asser Press, 2001) pp. 126-7.

⁹⁹ Case M.553 *RTL/Veronica/Endemol* [1996] OJ L34/32 para. 110.

¹⁰⁰ H. Ungerer 'EU Competition Law in the Telecommunications, Media and Information Technology Sectors' speech, New York City, 27 October 1995, para. 88 (available at <http://europa.eu.int/comm/competition/speeches/>).

¹⁰¹ See Arino 'Digital War and Peace' for a critique of the role of competition law in the pursuit of pluralism.

¹⁰² See pp. 105-10.

¹⁰³ Case C-62/86 *AKZO Chemie BV v. Commission* [1991] ECR I-3359 para. 60.

¹⁰⁴ E.g. *United Brands* [1978] ECR 207 and *British Airways/Virgin* [2000] OJ L30/1.

¹⁰⁵ See H. Hovenkamp *Federal Antitrust Policy* (St Paul, MN: West Publishing, 1994) pp. 244-5; ABA Section of Antitrust Law *Antitrust Law Developments* 4th edn (Chicago: ABA, 1997) pp. 355-6 for a review of the US cases.

dominance threshold in the EC is compatible with a competition policy designed to protect economic freedom because even firms that do not dominate the market absolutely are able to disrupt its functioning because of their commercial power. A lower threshold is also compatible with a strategic, post-Chicago, approach to market power because firms holding a large share of the market are more likely to be able to devise strategies that harm smaller competitors. In contrast, the high market shares deployed in the US signal a commitment to a neoclassical definition of market power. While the Commission begins with a neoclassical economic tool to identify the relevant market, it then uses the results to measure market power in a manner that is unrelated to neoclassical economics.

For completeness, two technical matters should be clarified. The first is that the market share of the dominant firm is insufficiently informative, and should be compared to the shares of competitors. The significance of a 40 per cent market share wanes if the second largest firm has a share of 39 per cent. In contrast, a large firm with a number of small fringe firms is more likely to have market power.¹⁰⁶ A related issue is that the stability of market shares over time suggests dominance, while fluctuating market shares indicate lively competition.¹⁰⁷ The second matter is about how to calculate market shares. For fungible goods market shares are calculated by the volume of sales; however, for other branded goods there is a preference to compute market shares by value, because this gives more prominence to the seller of expensive goods and reflects market power more accurately. In each case the aim is to identify the market share measurement that is the most accurate reflection of the firm's future market power.¹⁰⁸

3.4 Entry barriers

Market shares tell us little about market power if entry into the relevant product market is easy. In contestable markets (characterised by opportunities to enter and exit markets with ease), the incumbent has no market power, for it is continuously threatened by firms ready to enter the relevant market. As we noted in chapter 3, there is controversy on the correct economic approach to the identification of barriers to entry. However, this is mostly because the economics scholarship is not useful when applied to competition law. Economists are divided into two camps: some, following Bain, define entry barriers as those factors which allow existing firms to raise prices without inducing entry. Others, following Stigler, define entry barriers as those costs that a new entrant must face which were not incurred by incumbents when

they entered.¹⁰⁹ Under Stigler's approach entry barriers would be limited to intellectual property rights, or other kinds of government regulation,¹¹⁰ while following Bain's approach a wider range of factors would be considered to be entry barriers, in particular certain structural features of the market. For example, large economies of scale indicate that anyone participating in the market has to produce a large number of goods in order to break even, accordingly there may not be enough space in the market for more firms unless they operate at suboptimal scale (for example, assume that to produce widgets profitably each manufacturer has to make 1,000, but that total demand for widgets is 1,200: it would be uneconomical for a second firm to enter the market); product differentiation (especially if the dominant firm has a strong reputation, it will be costly to induce consumers to switch), absolute cost advantages due to superior access to technology, or location constitute Bainian entry barriers.¹¹¹ The 'Stiglerian' approach does not classify these factors as entry barriers because it is based on the premise that one should worry only about factors that deter efficient entry, and not about factors that merely deter entry by anyone. For instance, in response to those who see large economies of scale as an entry barrier in a market where demand is for 1,200 units and where the minimum efficient scale is 1,000 units, then no firm can profitably enter to make 200 units, but this is because the market is operating efficiently as it is. New entry would mean that one firm operates at suboptimal levels. Moreover, there is scope to compete 'for' the market in this instance. That is, a new entrant can try and conquer the sale of 1,000 units from the incumbent. Likewise, product differentiation and cost advantages are aspects of production which can be reproduced by the new entrant, and while greater costs make entry more risky, the same risk had been faced by the incumbent firm. In sum, Stigler criticises Bain for saying that an entry barrier is that which makes entry risky, while an entry barrier should be defined as that which makes entry more costly.

However, the economic debate between Stigler and Bain over what is an entry barrier is not particularly helpful in the application of competition law. First, it confuses the question of determining market power with the question of whether the person holding that market power should be penalised. Whether a monopoly should be condemned is a secondary question,

¹⁰⁹ J. S. Bain, *Barriers to New Competition: Their Character and Consequences in Manufacturing Industries* (Cambridge, MA: Harvard University Press, 1956); G. J. Stigler, *The Organization of Industry* (Homewood, IL: R. D. Irwin, 1968).

¹¹⁰ For example, the patents in *Case T-30/89 Hilti AG v. Commission* [1991] ECR II-1439; the exclusive monopoly right granted by the state in *Case 311/84 Centre belge d'études de marché - Télémarketing (CBEM) v. SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB)* [1985] ECR 3261 paras. 16-18.

¹¹¹ For a helpful explanation, see W. K. Viscusi, J. E. Harrington Jr and J. M. Vernon, *Economics of Regulation and Antitrust* 4th edn (Cambridge, MA: MIT Press, 2005) pp. 168-72; R. Schmalensee 'Ease of Entry: Has the Concept Been Applied Too Readily?' (1987) 56 *Antitrust Law Journal* 41, 43-4.

¹⁰⁶ The ECJ has recognised this point: see *Hoffmann La Roche* [1979] ECR 461 para. 48.

¹⁰⁷ *Ibid.* para. 44, noting that retaining large shares suggests dominance.

¹⁰⁸ Commission Market Definition Notice paras. 53-5. For an exhaustive catalogue of methodologies, see A. Lindsay *The EC Merger Regulation: Substantive Issues* (London: Sweet & Maxwell, 2003) pp. 152-81.

depending for example upon whether its behaviour lowers economic efficiency, so the criticism that Bain classifies certain efficiencies as entry barriers misses the mark.¹¹² Second, the debate is also unhelpful because the concern of competition law is not how the market will behave in the long run, but on whether in the short run the firms are able to raise prices and reduce output.

In both US and EC competition law, less effort is spent defining entry barriers and more is devoted to asking whether new entry is timely, likely and sufficient to counter the reduction in output and increase in price.¹¹³ First, entry must be likely to occur in time to quell anticompetitive behaviour; second, entry should be profitable, taking into account the sunk costs that entry entails; third, entry must be of a sufficient scale to reduce the market power of the existing firms.¹¹⁴ In the context of a merger, the question is whether, if the merger creates a dominant position, the firm can exploit this or whether entry barriers are so low that others can enter and prevent high prices. In abuse cases, the same question arises: are the high market shares truly indicative of the power to reduce output and raise price, or would a new entrant be able to establish an effective competitive counterpoint should prices rise? From this perspective, the Bain approach is preferable because it suits the purposes of competition law inquiries: examining the probability of fast, effective entry that would deter anticompetitive behaviour. In the US *Microsoft* litigation the Court of Appeals used a definition close to the Bainian model: 'factors (such as certain regulatory requirements) that prevent new rivals from timely responding to an increase in price above the competitive level'.¹¹⁵ This legal standard takes into account the important issue that the speed and degree of entry is relevant for competition law and the Stigler/Bain debate is unhelpful in the context of this kind of inquiry.¹¹⁶ This approach avoids defining entry barriers and considers matters from the perspective of incentives.

However, the approach taken by competition authorities is risky because it can lead to a slippery slope whereby any factor making entry more risky or difficult becomes an entry barrier without detailed scrutiny, an approach that exaggerates market power. In the EC for example, factors like a big technological lead over others, an effective sales network, or a successful advertising campaign that brings customer loyalty are entry barriers because they give the

¹¹² Hovenkamp *Federal Antitrust Policy* pp. 468-9, arguing that if there was a rule of no-fault monopoly whereby liability would be imposed purely based on dominance, then the Stiglerian approach would make sense, for one would not want to punish efficient monopolies.

¹¹³ *Guidelines on the Assessment of Horizontal Mergers under the Council Regulation of Concentrations between Undertakings* [2004] OJ C31/5 pt VI; DG Competition discussion paper on Article 82, paras. 35-7.

¹¹⁴ US Horizontal Merger Guidelines, section 3.

¹¹⁵ *US v. Microsoft*, 253 F.3d 34, 51 (DC Cir. 2001).

¹¹⁶ See D. W. Carlton 'Why Barriers to Entry are Barriers to Understanding' (2004) 94 *American Economic Review* 466.

firm technical and commercial advantages over rivals.¹¹⁷ The objection to treating these as entry barriers without more is that if capital markets are efficient then there is nothing to stop other firms from matching the incumbent in terms of research and development and advertising, allowing for quick entry. In this respect, the US Guidelines are crucially different from the EC's approach: in the EC something like advertising is an entry barrier *per se*, under the US Guidelines the question is whether the sunk costs of advertising by a new competitor can be recouped via successful entry, or whether the risk of failure is so great as to dissuade entrants. For instance, in *Kimberly-Clark/Scott* the Commission said: 'Any new entrant to the branded product market sector who does not enjoy the strength of an existing major brand would have to compete with the financial strength and resources of the combined Kimberly-Clark/Scott entry. Moreover, advertising expenditure and market share is self-reinforcing. On the one hand, there is the virtuous circle where high market share allows high profitability to engage in sustained advertising to support the brand. On the other hand, there is a vicious circle where low market share means low profits and inadequate resources to implement the necessary advertising campaign to boost flagging sales.'¹¹⁸ In contrast, under the US Guidelines, the approach is different. The competition authority would ask: is it worth obtaining enough resources to mount a credible advertising campaign that would allow the new brand to establish itself on the market and recoup the sunk advertising costs? Only if entry is too risky, because the incumbent's brand loyalty is so strong that no amount of advertising can displace the existing firms, will there be an entry barrier.¹¹⁹

However, striking a balance between a too wide and a too narrow conception of entry barriers is not easy, perhaps because entry barriers, like market definition, can be prey to political interests. According to Pitofsky for example, some formulations of market power and entry barriers by the American courts in the 1980s reflected a Chicago-inspired position, which rejected aggressive antitrust scrutiny. In his review of a number of significant decisions, he demonstrates how the courts tended to place emphasis on the hypothetical future possibilities of entry into the relevant market and failed to focus on the history of entry into the markets, which suggested that entry was unlikely.¹²⁰ Similarly, the Community's wider conception of entry barriers might be motivated by a policy designed to make it as easy as possible for firms to participate in the marketplace, guaranteeing 'disciplined pluralism'. The Community's approach may also be justified in light of economic evidence that entry in the EC market is in fact difficult, where entry has been by

¹¹⁷ E.g. *Hoffmann La Roche* [1979] ECR 461 para. 48; *United Brands* [1978] ECR 207 para. 122; *Eurofite-Banca/Hilti* [1988] OJ L65/19 para. 69.

¹¹⁸ Case IV/M.623 *Kimberly-Clark/Scott* [1996] OJ L183/1 para. 145.

¹¹⁹ E. Mensch and A. Freeman 'Efficiency and Image: Advertising as an Antitrust Issue' [1990] *Duke Law Journal* 321.

¹²⁰ Pitofsky 'New Definitions' p. 1805; but see Schmalensee 'Ease of Entry'.

firm technical and commercial advantages over rivals.¹¹⁷ The objection to treating these as entry barriers without more is that if capital markets are efficient then there is nothing to stop other firms from matching the incumbent in terms of research and development and advertising, allowing for quick entry. In this respect, the US Guidelines are crucially different from the EC's approach: in the EC something like advertising is an entry barrier *per se*, under the US Guidelines the question is whether the sunk costs of advertising by a new competitor can be recouped via successful entry, or whether the risk of failure is so great as to dissuade entrants. For instance, in *Kimberly-Clark/Scott* the Commission said: 'Any new entrant to the branded product market sector who does not enjoy the strength of an existing major brand would have to compete with the financial strength and resources of the combined Kimberly-Clark/Scott entry. Moreover, advertising expenditure and market share is self-reinforcing. On the one hand, there is the virtuous circle where high market share allows high profitability to engage in sustained advertising to support the brand. On the other hand, there is a vicious circle where low market share means low profits and inadequate resources to implement the necessary advertising campaign to boost flagging sales.'¹¹⁸ In contrast, under the US Guidelines, the approach is different. The competition authority would ask: is it worth obtaining enough resources to mount a credible advertising campaign that would allow the new brand to establish itself on the market and recoup the sunk advertising costs? Only if entry is too risky, because the incumbent's brand loyalty is so strong that no amount of advertising can displace the existing firms, will there be an entry barrier.¹¹⁹

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¹²⁰ Pitofsky 'New Definitions' p. 1805; but see Schmalensee 'Ease of Entry'.

the perspective of allocative efficiency, Liptons' presence or absence might be irrelevant; however, drawing on the core values of EC competition law, specifically economic freedom, there is a justification in defining the market narrowly so as to guarantee market players like Liptons access to the market. Yet even from the economic freedom perspective, one might chastise the decision because the independent repairers would not have gone out of business, they would have redirected their focus to servicing other cash registers, in what was a highly competitive market.¹²⁷

However, it would be wrong to say that the approach in *Hugin* is wrong from either an economic or a policy perspective, because there is a justifiable economic basis for the *Hugin* decision, although it is far removed from the Court's ratio decidendi. Post-Chicago economic theory suggests that there may be a separate market in spare parts if certain conditions obtain: (1) the primary product (the cash register) is expensive as compared to the spare parts; (2) the primary product has a long lifetime; (3) the costs of the secondary product (the after sales repair service) are uncertain. In these situations it is profitable for the firm selling the primary product to exploit the fact that the consumer lacks information about the total cost of spare parts over the lifetime of the product, or is 'locked in' because switching to another primary product is more expensive than buying spare parts for the original.¹²⁸ In these scenarios there might be market power in aftermarket, justifying the Court's narrow market definition in *Hugin*.¹²⁹ The aftermarket is worth monopolising because a small increase in the price of Hugin parts sold to their current owners is tolerated so long as the extra costs are less than the cost of switching to a different machine where the spare parts are cheaper. The Commission's Market Definition Notice acknowledges this kind of analysis, which has also been accepted by the US Supreme Court.¹³⁰ Again therefore, as with *United Brands*, the Notice *de facto* overrules the Court's earlier approach in favour of a standard which is in line with contemporary economics – here reaching the same conclusion as the Court, but on the basis of a policy designed to maximise consumer welfare, not a policy designed to safeguard the economic freedom of independent repairers.

This more economically inspired standard was applied in *Peitkam/Kyocera*.¹³¹ Peitkam complained that its attempts to sell toner cartridges that fit on printers made by Kyocera were being stifled by a number of tactical practices by

¹²⁷ E. M. Fox 'Monopolization and Dominance in the United States and the European Community: Efficiency, Opportunity and Fairness' (1986) 61 *Notre Dame Law Review* 981, 1003.

¹²⁸ Information costs and switching costs are the reasons the US Supreme Court is willing to find power in aftermarket: see *Eastman Kodak Co. v. Image Technical Services, Inc.* 504 US 451, 472–80 (1992).

¹²⁹ These matters were already noted by AG Reischl in *Hugin* [1979] ECR 1869, 1905, 1908 and are present in the Market Definition Notice para. 56. The issue is dealt with much more clearly in OFT Guidelines: *Market Definition* (December 2004) pp. 21–3.

¹³⁰ *Kodak* 504 US 451 (1992). ¹³¹ *Twenty-fifth Report on Competition Policy* (1996) p. 140.

small-scale firms that occupy niche markets without challenging the larger firms,¹²¹ suggesting that the differences in the way markets work in the US and the EU may require different regulatory norms.¹²²

4 Market power in aftermarket

Certain goods need spare parts or maintenance. For example, consumers buy one printer, but make several purchases of ink cartridges throughout the lifetime of the printer; consumers buy a photocopier and require servicing when it breaks down. Is the market for the additional goods and services consumers need after the initial purchase a separate product market for the purposes of competition law? In an early decision, *Hugin*, the Court held that spare parts were separate products.¹²³ *Hugin* held a 12–13 per cent share of the cash register market; however, in the market for the repair of Hugin cash registers, it held a monopoly, for only its spare parts could be used to fix broken cash registers. *Hugin* refused to supply spare parts to independent repairers (*inter alia* Liptons) and was accused of abusing its dominant position in the 'aftermarket' of parts for Hugin cash registers. The Commission concluded that the 'aftermarket' constituted a relevant product market, but this approach is controversial. Bishop and Walker have voiced scepticism about the possibility of market power in aftermarket when the firm faces strong competition in the primary market: 'we should expect competition in the primary market to have competed away any excess profits that might in theory be attached to the 100 per cent share of the spare parts market'.¹²⁴ That is, if *Hugin* were to sell its spare parts at high prices, consumers of Hugin cash registers would switch and buy other cash registers where the manufacturer sells cheaper spare parts.

It is arguable that the approach in *Hugin* is evidence of a policy-oriented market definition: the injured party was not the consumer (no evidence was available that *Hugin* set anticompetitive prices for repair services to its customers, in fact Advocate General Reischl deemed this evidence irrelevant)¹²⁵ but small, independent repairers who were being denied access to the market. The Commission's decision is replete with passages explaining the effect of the refusal to supply parts. (For example, 'Liptons has accordingly been forced gradually to withdraw from these businesses in which it had invested time and money and had established a strong basis for profitable expansion'.)¹²⁶ From

¹²¹ P. Gerosci and A. Jaquemin 'Industrial Change, Barriers to Mobility and European Industrial Policy' (1985) 1 *Economic Policy* 170, 182–3.

¹²² See generally P. A. Hall and D. Soskice 'An Introduction to Varieties of Capitalism' in P. A. Hall and D. Soskice (eds.) *Varieties of Capitalism* (Oxford: Oxford University Press, 2001).

¹²³ *Hugin/Liptons* [1978] OJ L22/23. The Commission lost the appeal because the Court held that there had been no effect on trade between Member States, but the conclusion on the definition of the relevant product market and its abuse has not been called into question: Case 22/78 *Hugin Kassaregister AB and Hugin Cash Registers Ltd v. Commission* [1979] ECR 1869.

¹²⁴ Bishop and Walker *Economics* para. 4.81. ¹²⁵ [1979] ECR 1869, 1911.

¹²⁶ *Hugin/Liptons* [1978] OJ L22/23, p. 32.

Kyocera to ensure that consumers bought the manufacturer's own cartridges. However, the Commission found that there was no separate market for toner cartridges for printers because consumers were well informed about the prices of the replacement part and took this into account when choosing which printer to buy. Therefore Kyocera had no dominant position it could abuse.

However, the post-Chicago aftermarket theory is controversial: it rests on specific market circumstances that appear unrealistic for some, or unduly patronising to others. For instance, it assumes that the buyer is uninterested in working out the total cost (including the anticipated maintenance costs) of the goods she buys, or unable to work this out. In particular, in a competitive market for primary products, sellers are often keen to compete by offering inexpensive secondary products. Moreover, the exercise of market power in aftermarkets is limited if the manufacturer is concerned about adverse effects on its reputation: if its aftermarket prices are too high, consumers may cease purchasing the primary product. In the long run then, exercising power in an aftermarket is counterproductive.¹³²

5 Product differentiation and market power: the irrelevance of market definition

It cannot be denied that sellers of branded goods are able to set prices that are higher than the competitive price – Armani jeans are more expensive than unbranded jeans even if the only difference is the label. Economists use the notion of 'monopolistic competition' to describe markets with differentiated products, for each manufacturer has a degree of market power, but not to the extent that a monopolist holds market power. In these markets, which represent most of the goods that final consumers buy, competition is often not based uniquely on price but also on other attributes of the product, be it brand image or quality. The question for competition policy is whether a firm selling branded goods can ever have enough market power to behave anticompetitively and to cause damage to the values that competition laws seek to protect. In some decisions, the relevance of brand image was noted: for example, the Commission noted that there was low substitutability in the minds of consumers between luxury cosmetics and other ranges of cosmetics, so that the former were a separate market,¹³³ and in *United Brands*, the firm's strong brand was evidence of dominance, although in other cases the facts showed that brands were irrelevant to consumer choice.¹³⁴ However, the risk of using a strong brand as the only source for identifying market power for the

¹³² See generally C. Shapiro 'Aftermarkets and Consumer Welfare – Making Sense of *Kodak*' (1995) 63 *Antitrust Law Journal* 483; S. Borenstein, J. K. MacKie-Mason and J. S. Netz 'Antitrust Policy in Aftermarkets' (1995) 63 *Antitrust Law Journal* 455.

¹³³ Case T-19/92 *Groupeement d'achat Edouard Lederc v. Commission* [1996] ECR II-1851 para. 186.

¹³⁴ Case M.623 *Kimberly-Clark/Scott* [1996] OJ L1831 para. 48.

application of competition law is that we could find market power in every imperfectly competitive market.¹³⁵ Nonetheless, there seem to be certain circumstances where market failures may result in the context of branded goods primarily because of product differentiation.

Considering product differentiation as the source of market power arises in the relatively novel notion of 'unilateral effects' in merger analysis, which we introduced in chapter 4 and will consider more fully in chapter 8.¹³⁶ The US Merger Guidelines suggest that in markets with differentiated products, competition between some brands may be keener than among others. While the relevant market may include all similar products, the degree of competition between brands A and B is greater than that between brands A and C or B and C. In these circumstances, a merger between brands A and B may allow the merged entity to raise the price of one or both products, knowing that consumers are unwilling to switch to other brands.¹³⁷ This approach was applied in the FTC's case against the merger between Heinz and Beech-Nut, the second and third largest manufacturers of jarred baby foods. The leading firm, Gerber, had a 65 per cent share of the market and was the undisputed leader, while Heinz and Beech-Nut trailed with 17.4 per cent and 15.4 per cent of the market respectively. However, the FTC observed that there was strong competition between the Heinz and Beech-Nut brands, and that a merger would eliminate this, leading to higher prices by the merged entity. While there was no market power in the traditional sense of high market shares, the Court identified a risk to consumer welfare, without needing to define a market. Market power was identified directly.¹³⁸

The kind of market power found in the *Heinz* case could be identified using the traditional tools we explained above. The evidence suggested that supermarkets bought Gerber no matter what because it was a must-stock brand. Then the supermarket chose either Heinz or Beech-Nut as a second choice. Accordingly, the relevant market from the perspective of the supermarket was the second brand of baby food. If one applied the SSNIP test one would find that if Gerber were to raise prices, it would not lose sales, but that if Heinz did, it would lose sales to Beech-Nut (and vice versa), and if, after the merger, the Heinz/Beech-Nut entity raised prices, it would be profitable as the supermarket had no other product to offer as a second choice brand. However, this exercise is unnecessary: we do not need to define the market or to compute market shares when the data tell us that anticompetitive effects are foreseeable

¹³⁵ T. C. Arthur 'The Costly Quest for Perfect Competition: *Kodak* and Nonstructural Market Power' (1994) 69 *New York University Law Review* 1; *Kodak* 504 US 451 (1992), Scalia J's dissent.

¹³⁶ See pp. 256–64.

¹³⁷ US Horizontal Merger Guidelines para. 2.21. See also C. J. Werden 'Expert Report in *United States v. Interstate Bakeries Corp. and Continental Baking Co.*' (2000) 7 *International Journal of the Economics of Business* 139.

¹³⁸ *FTC v. H. J. Heinz Co.* 246 F.3d 708 (2001).

if Heinz and Beech-Nut join forces.¹³⁹ In recent cases the Commission has begun to move away from defining a market in order to identify market power, and towards testing directly whether the firm in question has market power. This can occur in the context of goods characterised by product differentiation because the Commission is able to obtain the data necessary to identify consumer preferences. Two merger cases exemplify the application of this emerging method to determine market power by the Commission.

In *Bayer Healthcare/Roche* the parties to the merger sold anti-acid over-the-counter medicines (medicines that treat heartburn and acid-related gastric disorders): Bayer had the 'Talcid' brand and Roche the 'Rennie' brand. In Germany their combined market share was 30-35 per cent and the Commission considered whether the two medicines were particularly close substitutes so that they might raise prices. It considered replies from customers, competitors and pharmacists to conclude that the two products were poor substitutes: Rennie was considered as a relatively 'simple' drug, marketed through mass consumer advertising, while Talcid was in closer competition with a range of other medicines marketed through pharmacist endorsement.¹⁴⁰ In the Austrian market Rennie had a market share of 40-50 per cent and was the clear market leader, while Talcid had a market share of 10-15 per cent. However, the combined market share of 55-60 per cent overstated the effect of the merger because in this country too Rennie was positioned at the more casual end of the market, and Talcid was a distant substitute, so an increase in the price of Talcid would not result in more sales of Rennie: consumers would substitute for other high-end drugs.¹⁴¹

In *Johnson & Johnson/Guidant* the parties were active in the market for endovascular stents (specialised medical equipment). The merger would have reduced the number of firms from three to two. Competition was largely based upon brand reputation. Considering the three major firms, the Commission, relying upon a survey of doctors, discovered that the products of the merging firms were each other's closest competitors. That is, doctors would substitute Johnson & Johnson most readily with Guidant's product and vice versa: 62 per cent said Guidant was the best substitute for J&J and in 78 per cent of the responses it was the first or second best.¹⁴² Moreover, there was no comparable closeness of substitution with the other brands. This evidence indicated that a merger would remove J&J's strongest and closest competitor. The effect would be to eliminate head-to-head competition, causing higher prices and a slower rate of innovation.¹⁴³

In the first case closeness of competition was considered even when the market shares did not suggest there would be a dominant position in order to test whether the branded goods might be close competitors, while in the second case the close substitutability was

helpful in predicting that the merger would lead to an impediment of effective competition. The method deployed in these two cases made it unnecessary to prove dominance indirectly by reference to market shares. This method does not remove the need to consider entry barriers, or the ability of competitors to rebrand their goods to try and compete against the firm that has market power.

The application of this novel method requires caution. In *US v. Oracle* for example, the Department of Justice argued that in a market for a certain type of business software, Oracle and PeopleSoft (the two entities seeking to merge) were each other's closest competitors. The evidence showed that when Oracle competed against PeopleSoft, consumers would get discounts that were 9-14 per cent greater than when Oracle sold the good with no competitors vying for the same customer. However, the Court held that this evidence was insufficient on its own. It merely indicated that Oracle and PeopleSoft 'often meet on the battlefield and fight aggressively' but it did not show whether the same aggressive competition also obtained when Oracle was facing other competitors.¹⁴⁴ The evidence must show that in markets where one of the two closest competitors is absent, the other is able to raise prices because it feels no competitive pressure from anyone else. The evidence must also show that when Oracle and PeopleSoft go head to head, there is not also a third supplier who is forcing the prices down.

There is nothing in the method just described that suggests it should be limited to merger cases, where the competition authority is predicting the future effects on the market should the merger go ahead. It is equally possible to apply this approach in situations where the competition authority is reviewing the previous conduct of a firm – if anticompetitive effects are shown to exist, then it can be presumed that the firm in question has market power, without the need to identify a product and a geographical market.¹⁴⁵ This method allows a competition authority to identify firms that hold significant market power and are able to exploit it by monopolisation: reducing output and increasing price. Foreseeable consumer harm is proven directly without the need to identify a relevant market.

6 Market power in Article 81

As noted above, when applying Article 81, there has been little substantive analysis of market power. However, three themes emerge from the case law and Commission documents, which show that different policy concerns have animated the Commission's decisional practice.

¹⁴⁴ *Oracle* (2004) 331 F Supp 2d 1098, 1169.

¹⁴⁵ For an assessment of the US case law that deploys this approach, see J. A. Keyte and N. R. Stoll 'Markets: We Don't Need No Stinking Markets! The FTC and Market Definition' (2004) 49 *Antitrust Bulletin* 595.

¹³⁹ M. G. Schildkraut 'Oracle and the Future of Unilateral Effects' (2004) 19 *Antitrust* 20.

¹⁴⁰ Case M.3544 *Bayer Healthcare/Roche* (OTC Business), 19 November 2004, paras. 33-9.

¹⁴¹ *Ibid.* paras. 40-5.

¹⁴² Case M.3687 *Johnson & Johnson/Guidant*, 25 August 2005, para. 266. ¹⁴³ *Ibid.* paras. 312-13.

6.1 Safe harbours

First, the Commission has applied a jurisdictional concept of market power, and devised safe harbours using market shares. The lowest safe harbour is found in the Notice on Agreements of Minor Importance.¹⁴⁶ In the Notice the Commission begins by stating that agreements between firms where the market share is below a certain threshold do not appreciably restrict competition. In agreements between competitors the threshold is an aggregate market share of 10 per cent (e.g. a joint venture agreement where one firm has 4 per cent and the other 3 per cent of the relevant market); in agreements between firms who are not competitors (e.g. a distribution agreement) then provided neither party has a market share exceeding 15 per cent the agreement benefits from the Notice. However, the Notice goes on to say that there are certain types of agreements that do not benefit from this exclusionary rule. In the context of agreements between competitors, the following agreements are forbidden even if the joint market shares are below the 10 per cent threshold: (1) agreements fixing prices; (2) agreements limiting output or sales; (3) agreements which allocate markets or customers.¹⁴⁷

The Notice fails to take account of the case law of the Court of Justice, which suggests that some agreements are between firms of such little economic significance that competition law should not apply at all.¹⁴⁸ According to one view, there are two low market share thresholds in EC competition law. First there is a 'very low' market share threshold (below 1 per cent) where firms have absolute freedom to enter into whatever agreements they please and then there is a 'quite low' market share threshold established in the Notice (above 1 per cent and up to the thresholds in the Notice) where firms have some freedom but cannot implement agreements that are egregiously unlawful.¹⁴⁹

The next thresholds are found in Block Exemption Regulations, and the format is the same as the Notice.¹⁵⁰ That is, the Regulations provide that undertakings with market shares below a given amount, and which enter into agreements that do not include certain terms that are expressly forbidden, have their agreements exempted automatically. We analyse one of these Regulations in depth in chapter 10.

The rationale behind this approach is that under Regulation 17/62 the Commission operated a system whereby parties were compelled to notify agreements to gain exemption, and the Commission was snowed under with trivial contracts that were unlikely to harm competition but were being notified so the parties could obtain legal security. The Notice on Agreements of Minor Importance and the Block Exemptions are responses to this problem:

¹⁴⁶ Notice on Agreements of Minor Importance [2001] OJ C368/13. ¹⁴⁷ *Ibid.* para. 11.

¹⁴⁸ Case 5/69 *Valk v. Verwaerde* [1969] ECR 295, 302.

¹⁴⁹ Faul and Nikipay *EC Law of Competition* paras. 2.66-2.70.

¹⁵⁰ E.g. Article 4, Regulation 2659/2000 on the Application of Article 81(3) of the Treaty to Categories of Research and Development Agreements [2000] OJ L304/7.

they presume that firms below the thresholds have insufficient market power to harm competition. The approach might cause Type 2 errors (a failure to punish certain harmful conduct) but the administrative cost savings vastly outstrip the risk of a few harmful agreements escaping scrutiny. The institutional inability to cope with notification led to the safe harbour approach. One criticism of the safe harbour approach, which we will consider more fully in chapter 10, is that the list of contract terms that take the agreement outside the safe harbour is too long, and that if the Commission was serious about leaving those without market power alone, it should provide that they have absolute freedom to enter into whatever contracts they wish, even fixing prices.

6.2 Quasi per se rules

A second significant consideration is that under Article 81 certain kinds of agreements are unlawful without the need to carry out a market-power test. The rationale for this is that certain types of agreement 'would always or almost always tend to restrict competition and decrease output'.¹⁵¹ In US antitrust jargon, this is known as the rule of per se illegality. Price-fixing agreements by competitors are per se illegal, regardless of the market power the firms have, and regardless of any pro-competitive justification the firms might be able to provide. Justice Thurgood Marshall explains the reason for per se illegality:

Per se rules always contain a degree of arbitrariness. They are justified on the assumption that the gains from imposition of the rule will far outweigh the losses and that significant administrative advantages will result. In other words, the potential competitive harm plus the administrative costs of determining in what particular situations a practice may be harmful must far outweigh the benefits that may result. If the potential benefits in the aggregate are outweighed to this degree, then they are simply not worth identifying in individual cases.¹⁵²

The per se rule is one of administrative convenience. We know that most price-fixing agreements among competitors are likely to harm consumers. By banning all of them, the risk of Type 1 errors (over-enforcement preventing pro-competitive behaviour) is low, and the administrative costs of analysing in detail each price-fixing case are greater than the reduction of Type 1 errors.

In EC competition law, something resembling the per se rule can be seen when the Commission penalises agreements whose 'object' is the restriction of competition. The Court has held that if an agreement is designed with the intention to restrict competition,¹⁵³ or if the restriction is foreseeable, or 'obviously capable'¹⁵⁴ of restricting competition, then the agreement is unlawful for the purposes of Article 81(1) without market analysis (except perhaps if

¹⁵¹ *Broadcast Music Inc. v. CBS* 441 US 1, 19-20 (1979).

¹⁵² *US v. Container Corporation of America* 393 US 333, 341 (1969).

¹⁵³ Case C-551/03P *General Motors v. Commission*, judgment of 6 April 2006, paras. 77-8.

¹⁵⁴ *Ibid.* Opinion of AG Tizzano para. 77.

the market share is 'very low' as discussed in section 6.1). This approach can be found most frequently when parties enter into agreements that divide the market or in cartel cases. However, the Community does not apply a strict *per se* approach. The CFI has held that every agreement may in theory be exempted under Article 81(3),¹⁵⁵ therefore even agreements that are prohibited because they run against the core values of EC competition law may be exempted. As we noted in chapter 4 for example, price-fixing and cartel-like arrangements may be exempted when other Community policies justify this.

6.3 An evolving market power analysis

In cases that do not benefit from an automatic presumption of legality (safe harbours) or an automatic presumption of illegality (*quasi per se* illegality), the Commission's approach has evolved. Before Regulation 1/2003 the application of Article 81(1) did not require a finding of market power. As we saw in chapter 2, so long as a restriction of competition is identified as a restriction of economic freedom, market power does not come into consideration. Under this wide reading of Article 81(1), the role of market power was relegated to Article 81(3). That is, the party seeking to obtain an exemption bore the burden of proving that the agreement did not eliminate competition (the final condition in Article 81(3)). In most cases, proof that the parties lacked market power was sufficient to allow the Commission to infer that the agreement did not eliminate competition, and agreements where the firm had market power were not exempted.¹⁵⁶ The Commission's original approach under Article 81 did contain a market-power inquiry, but the burden was placed on the defendant seeking exemption to show that there was no market power.

The emerging approach instead contains a market-power inquiry in Article 81(1). If the market power of the parties defined in neoclassical terms was used as a threshold question in the application of Article 81, very few agreements that we reviewed in chapters 2 and 4 would be caught. It remains to be seen how far the methods outlined above to identify market power for the purposes of Article 82 and the Merger Regulation will be applied regularly in Article 81 cases and how far market power in this way will play a role in Article 81(1).

In sum, under Article 81, there seem to be two concepts of market power. Very low degrees of market power (where market shares are a jurisdictional threshold) determine the non-application of the prohibition of Article 81. For firms whose market shares exceed the safe harbours (or whose contracts contain clauses that are inadmissible under the safe harbours) then a more detailed analysis of market power is used to determine the anticompetitive

effects of an agreement, unless the object of the agreement is a restriction of competition, in which case no market-power analysis is required.

7 From commercial power to market power

The relevance of the discussion in this chapter is captured by this assessment by the US Supreme Court: '[b]ecause market power is often inferred from market share, market definition generally determines the result of the case'.¹⁵⁷ As the EC moves towards an enforcement policy based upon an economic approach, the identification of market power and the tools necessary for that task are of growing importance. However, there is a tension: on the one hand, the Commission is increasingly using market definition tools that rely on economic analysis and which are premised upon discovering whether a firm has market power in the neoclassical sense. On the other, the Court's case law in Article 82 suggests that the meaning of market power is associated with commercial power. The means to define markets that the Commission is developing seem to be inconsistent with the notion of market power being used by the Courts and the Commission itself. This apparent tension can be resolved by indicating that Community competition law is in transition. There is a political commitment to embrace economic methods, but this is developing against a background of decades of enforcement premised upon the economic freedom model. However, until a transition is made to a particular economic theory of competitive harm (whether neoclassical or post-Chicagoan) there will be tensions and contradictions in the Community's application of competition law.

There are two more specific lessons that emerge from this chapter. The first is about the role of economic analysis in identifying market power. There is no doubt that since the coming into force of the Merger Regulation, market definition has become more sophisticated: it is in the merger cases before the Market Definition Notice that the Commission began to use the hypothetical monopoly test, and where it is now pioneering novel methods that allow the direct identification of market power, dispensing with market definition and market shares. The merger decisions tend to embody a more economics-based approach than decisions about past infringements.¹⁵⁸ However, as we have seen, the Commission does not apply the hypothetical monopolist test regularly. More generally, the market definition plus market share approach is an interesting illustration of the resilience of certain economic paradigms.

¹⁵⁷ *Kodak v. IT'S* 54 US 451 (footnote 15).

¹⁵⁸ Kauper 'Problem of Market Definition', p. 1700. See also I.S. Vemit 'Brave New World: The Modernisation and Decentralisation of Enforcement under Articles 81 and 82 of the EC Treaty' (2003) 40 *Common Market Law Review* 545, making similar suggestions. There are of course certain pre-1997 non-merger cases where the Commission does deploy an economic approach to market definition. See, for example, references to demand elasticities in *Tetra Pak 2* [1992] OJ L72/1 para. 93.

¹⁵⁵ Case T-17/93 *Matra Hachette v. Commission* [1994] ER II-595.

¹⁵⁶ E.g. Cases 209/78 etc. *Van Landuyck v. Commission* [1980] ECR 3125 (agreement affecting 80 per cent of the relevant market not exempted).

Judging market power by market shares is an approach closely associated with the SCP paradigm, which was challenged by the Chicago School. Nonetheless, market share analysis remains at the heart of competition law inquiry because it provides a relatively simple rule of thumb to identify markets where competition is at risk. The chapter also suggests that the Commission has been less than enthusiastic in applying Chicagoan approaches (for example, there is a wider list of conditions that constitute entry barriers in EC competition law than the Chicago School identifies), but has accepted some of the insights of the post-Chicago paradigm, for instance aftermarkets and direct proof of market power.

The second lesson from this chapter is about the role that policy plays in the definition of the relevant market. As shown in chapter 2 with reference to the meaning of 'agreement', even technical legal issues may be resolved on the basis of the underlying policies that animate the law. In this chapter we have seen some decisions where the Commission's definition of the relevant market can be characterised as 'strategic'. That is, the market is identified in order to achieve a specific regulatory objective: pay-TV is seen as a separate market even when the application of the hypothetical monopolist test may suggest otherwise because the Commission wishes to apply competition law to promote the development of this industry, or to safeguard pluralism. Accordingly, even if a more economics-oriented approach to market power is developed, there are instances where market definition is used to facilitate the achievement of wider, public policy ambitions.

6

Abuse of a dominant position: anticompetitive exclusion

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