
Introduction to competition law

1.1 Introduction

The primary purpose of competition law is to remedy some of the situations in which the free market system breaks down. The point was well made in the House of Lords debate during the passage of the Competition Act 1998 that ‘competition law provides the framework for competitive activity. It protects the process of competition. As such it is of vital importance’ (Hansard (HL) 30 October 1997, col. 1156).

The ‘invisible hand’ that Adam Smith identified in 1776 ensures in most situations that free market economies left to their own devices will produce results more beneficial than can be realized by intervening in the markets. This conclusion has been supported by evidence put forward by economists over the last 200 years, and, since the collapse of East European planned economies, forms the basis for most of the world’s economic systems. The process of competition is seen as being of value and meriting protection. In its White Paper *Productivity and Enterprise* (Cm. 5233, July 2001), the UK Government argued that

The importance of competition in an increasingly innovative and globalised economy is clear. Vigorous competition between firms is the lifeblood of strong and effective markets. Competition helps consumers get a good deal. It encourages firms to innovate by reducing slack, putting downward pressure on costs and providing incentives for the efficient organisation of production. As such, competition is a central driver for productivity growth in the economy, and hence the UK’s international competitiveness. (para. 1.1)

Similar sentiments, albeit on a less grand scale, were expressed by the UK Competition Commission (‘CC’) in a recent report into the contemplated merger (examined under the now defunct merger provisions of the Fair Trading Act 1973) between Safeway plc and any one of a number of supermarket chains:

When working effectively, competition involves a process of rivalry between firms that strive to win customers’ business by achieving the lowest level of costs and prices, developing new products or services or exploiting particular strengths, skills or other advantages to meet customer needs more effectively than competitors. (*Safeway plc and Asda Group Limited (owned by Wal-Mart Stores Inc); Wm Morrison Supermarkets PLC; J Sainsbury plc; and Tesco plc: A report on the mergers in contemplation* (Cm. 5950, September 2003), at para. 2.88)

It is often said, however, that 'competition sows the seeds of its own destruction'; encouraged to compete, successful entrepreneurs may achieve positions where they are able to prevent others from competing and thereby damage the process as a whole. A variant on this problem is that there may be some situations in which there is only room for a single firm in a market, and, unless steps are taken to regulate the conduct of this firm, it too may act to the detriment of the economy. The fact that in both the EC and the UK a competitor harmed by another's unlawful anti-competitive conduct may go to court to seek damages or another suitable remedy also serves to place stress on the right of business people to conduct their affairs in a fair and reasonable commercial environment. Competition law is not, directly, about consumer protection, or trading standards, although both may benefit from the application of competition law (see, however, Averitt, N.W., and Lande, R. H., 'Consumer Sovereignty: A Unified Theory of Antitrust and Consumer Protection Law', (1997) *Antitrust Law Journal* 713).

In the United Kingdom there are two systems of competition law: domestic law and the law of the European Community (EC). The relationship between these two regimes is examined in Chapter 3. With the passage of the Competition Act 1998 the domestic regime was strengthened and, following the demands of both the business community and consumer groups, brought into much closer alignment with EC law. An examination of these two regimes forms the basis of this book. Most of the law dealt with here is based on statutes or other public enactments. In both systems lawyers and regulators are likely to look for guidance to the operation of the antitrust law of the United States, which is briefly introduced later in this chapter, and then considered in relation to specific cases throughout the book. The common law of England and Wales remains applicable in a small class of cases, which are considered further in Chapter 21.

To the frustration of many lawyers competition law is heavily reliant on economics, and it is not only those new to the subject who may be hesitant when dealing with a different discipline with its own language and 'rules'. In practice lawyers handling the more complex cases are likely to rely on expert witnesses and documentation provided either by companies themselves or by firms of economic consultants. However, without some understanding of what questions should be raised, and what significance the answers then have, such communication becomes difficult and inefficient. It is for this reason that the reader of this book is faced with economics both later in this introduction, and in Chapters 8, and 18. It might be possible to pass these by, but the case law that is discussed elsewhere will be clearer if they are read, and then returned to as necessary. These sections are not intended to serve as a complete guide to the subject of industrial economics, and the interested reader is referred to specialist texts. Particularly useful is Bishop, S., and Walker, S., *The Economics of EC Competition Law*, London, Sweet & Maxwell, 2nd edn, 2002.

1.2 The development of competition law

The American Sherman Act 1890 is taken as the starting point of modern competition (or in America, 'antitrust') law but the roots of competition law lie much deeper. Senator Sherman himself told the Senate that his bill did 'not announce a new principle of law, but applies old and well-recognized principles of the common law to the complicated jurisdiction of our State and Federal Government'. It has even been suggested, unconvincingly, that the Act is based in part on the Constitution of Zeno, Emperor of the East from 474 to 491, promulgated in 483. Roman legislation dealing with some aspects of competition predates the Constitution by over 500 years.

In England competition law has developed in fits and starts since before legal memory, and only in the last half of the twentieth century was it subjected to rigorous economic analysis. At present there is no satisfactory single history of the early competition laws, and much of the best work has been done by those researching the circumstances surrounding the creation of the Sherman Act in 1890 (see, e.g., Thorelli, H. B., *The Federal Antitrust Policy*, Stockholm (1954); see also Lord Wilberforce, Campbell, A., and Elles, N., *The Law of Restrictive Trade Practices and Monopolies*, London, Sweet & Maxwell (2nd edn, 1966)). Various Saxon kings had taken action against a range of trading practices, including, for example, the purchase of commodities before they reached their designated market place in order to enhance the price, and make a profit on a later sale, known as the crime of foresteal, or forestalling, which is referred to in the Domesday Book (1086). Other laws set out punishments for ingrossers, who similarly obtained agricultural produce with the intention of reselling it at a profit; regrators, who purchased products in one market place to resell them in either the same or a neighbouring market at a higher price; and travelling salesmen, known as 'badgers', who dealt mainly in foodstuffs, purchasing in one place and reselling at a premium in another. At the time of the Magna Carta (1215) legislation provided that all monopolies were to be contrary to the law because of their pernicious effect on individual freedom.

The great plagues that swept across Europe in the late medieval period resulted in shortages of both labour and commodities. Although it is now believed that contemporary accounts tended to exaggerate the impact of the plagues, and of the Black Death in particular, there is no reason to doubt that 'there was such a scarcity of labourers that women and even small children could be seen at the plough and leading the waggons' (Keen, M., *Medieval Europe*, London, Penguin Books (1968), p. 234). The various statutes which aimed to fix both prices and wages at pre-plague levels in order to prevent labourers moving to seek better-paid employment, thereby damaging the interests of landowners, were a response in part to problems created by these shortages. The 1349 Statute of Labourers is notable by virtue of its introduction of the requirement that merchants overcharging should pay multiple damages to injured parties, which is followed today in the American treble-damages suit (see Chapter 6).

It has also been suggested that the common law doctrine of ‘restraint of trade’ (which is defined in Chapter 21) emerged in response to the pressures caused by labour shortages. *John Dyer’s* case (1414) YB 2 Hen 5 (of. 5, pl. 26) appears to be the first recorded case of restraint of trade. John, the Dyer, had sought to enforce a writ against a colleague who had covenanted not to practise the craft of dyeing in the same town as John Dyer for half a year. Fortunately for Dyer he was not in court when the case was heard, for the judge held that the provision was against the common law ‘and by God, if the plaintiff were here, he should go to prison’. The rule that covenants in restraint of trade were not enforceable remained in place until the beginning of the seventeenth century, at which time added flexibility was introduced to accommodate changing circumstances (see, e.g., *Rogers v Parrey* (1613) 80 ER 1012). By the middle of the nineteenth century the courts had introduced, and had begun to expand on, the relationship of the public interest to the operation of the doctrine. In *Horner v Graves* (1831) 131 ER 284, the judge brought the doctrine close to the modern day when he held that ‘we do not see how a better test can be applied to the question whether reasonable or not, than by considering whether the restraint is not so large as to interfere with the interests of the public’. The extent to which restraint of trade was concerned with the issue of monopoly per se is a question that has not been fully resolved. It appears that judges were at least as swayed by arguments as to individual liberty, and as to the cost to the public purse of the support, however rudimentary, that might be available to the worker who was not able to secure employment because of the restraint’s operation. More recent developments, discussed at 21.2.3, appear to bring the doctrine into the mainstream of competition law, and to link it directly with EC competition law.

There was little the common law could do to combat arrangements between businesses, and this area was left largely to various statutes. However, the doctrine of conspiracy crept into the area of trade regulation from the seventeenth century onwards, particularly in relation to the attempts of working people to organize themselves. The doctrine was applied to business situations in the eighteenth century, but then fell into disuse. It was confirmed in *Mogul SS Co. Ltd v McGregor Gow & Co.* [1892] AC 25, that it would be applied only where the objective of the conspiracy was illegal, and that it was not illegal to seek to improve a business position.

1.2.1 Monopolies and the Crown

The word ‘monopoly’ was probably first used in England by Thomas More in *Utopia* (1516). It carried a specific meaning:

A Monopoly is an Institution, or allowance by the King, by His Grant, Commission, or otherwise, to any person or persons, bodies politic or corporate, of or for the sole buying, selling, making, working or using of any thing, whereby any person or persons, bodies politic or corporate are sought to be restrained of any freedom, or liberty that they had before or hindered in their lawful trade. (The US Supreme Court in *Standard Oil Co. of New Jersey v US* (1911) 221 US 1, citing Sir Edward Coke, *Institutes*)

Such monopolies were increasingly granted from the mid-1300s. In Elizabethan England (1558–1603) the system of Industrial Monopoly Licences was heavily abused as a mechanism for raising funds for the monarch without the inconvenience of consulting Parliament. Although Parliament protested, the Queen was able to persuade it to drop a Bill that would have curbed the practice. It was therefore left to the courts in 1602 to rule that a grant of a monopoly for the making of playing cards to one Darcy was illegal and void (*Darcy v Allin* (1602) 11 Co Rep 84b—also known as the *Case of the Monopolies*). Even at this time the arguments against monopoly practices were becoming well rehearsed, and the court found that there were inevitable and unwelcome consequences of all monopolies: an increase in price; a reduction in quality; and a reduction in the incentive to work. The position in the early 1600s was such that Ben Jonson, in *The Devil is an Ass* (1616), was able to satirize for his audiences the practice of granting monopolies and those who negotiated them: the character of Merecraft, ‘The Great Projector’, promoted and sold increasingly fantastical monopoly schemes, including an inventive scheme to monopolize the market in toothpicks.

The conflict between Crown and Parliament was resolved in 1623 with the passing of the Statute of Monopolies, which declared that ‘All Monopolies . . . are altogether contrary to the Laws of this Realm, and so are and shall be utterly void and of none effect and in no wise to be put into use or execution’. In making an exception for patents for a period not exceeding 21 years save where these operated to raise prices or to damage trade, the statute also formed the basis for the modern law of patents. Monopolies could still be granted to trading corporations and guilds, a practice much used by Charles I. In the ‘Great Case against Monopolies’, *East India Company v Sandys* (1685) 10 St Tr 371, it was held that a distinction could be drawn between monopolies operating *within* the realm, and those established in order to compete *outside* the realm. In the latter situation it was accepted that only a firm in a strong position could trade successfully in the difficult conditions prevailing. This argument finds a modern counterpart in the debate on the relationship between competition and national industrial policy, in particular the promotion of ‘national champions’: ‘Competition can be enormously beneficial in many cases, but where it involves the destruction of strong interests in a wider context, it could be weakening from UK PLC’s point of view’ (Graeme Odgers, MMC Chairman, *Evening Standard*, 5 May 1993).

In 1772, following a House of Commons committee report, most of the old laws were repealed, and by 1844 all earlier Acts were repealed, it then being considered that the prohibitions had effects contrary to that intended, and were partly responsible for inhibiting trade and raising prices. From that time till now monopolies have not been prevented in the United Kingdom, and the modern law of competition deals with issues of the *abuse* of monopoly power, not with its existence per se.

The United Kingdom, with a belief in the benefits of economic laissez-faire, did not return to competition law until after the Second World War, when in 1948 legislation was introduced that established a domestic structure for the

examination and control of anti-competitive competitive conduct. The domestic regime now is found primarily in two statutes, the Competition Act 1998 ('CA 98'), and the Enterprise Act 2002 ('EA 02').

1.2.2 Competition law and the EC

According to the European Court of Justice the provisions of EC law dealing with competition constitute 'a fundamental provision . . . essential for the accomplishment of the tasks entrusted to the Community and, in particular, for the functioning of the internal market' (*Eco Swiss China Time Ltd v Benetton International NV* case C-126/97 [2000] 5 CMLR 816, para. 36).

Provisions relating to competition law were included in the Treaty of Rome of 1957, which formed the legal basis for the European Economic Community, from the outset. Thus:

From the inception of this process, there seems to have been little doubt that the Treaty would have to include provisions aimed at combating restraints on competition. Not only had such provisions been included in the ECSC treaty, but there seems to have been general agreement that the elimination of tariff barriers would not achieve its objectives if private agreements or economically powerful firms were permitted to be used to manipulate the flow of trade. (Gerber, D. J., *Law and Competition Policy in Twentieth Century Europe—Protecting Prometheus*, Oxford, Clarendon Press (1998), p. 343)

Articles 85 and 86 of the Treaty (now arts 81 and 82) related to the control of anti-competitive agreements and dominant firm abuses. Similar provisions had been placed in the earlier European Coal and Steel Community Treaty of 1951. There has been a substantial and interesting debate as to the policy pressures that underlay the inclusion of these provisions. David Gerber's seminal work, quoted above, deals in part with this question and the argument is made persuasively that rather than slavishly adopting an American-style model based on sections 1 and 2 of the Sherman Act (see below) the relevant Treaty provisions reflected a distinctly European approach to the issue of anti-competitive conduct. In particular the German *ordo-liberals* are cited as a key influence in the determination of the European policy. Some commentators have attacked Gerber's thesis, and it may be argued that whatever the roots of the policy, its operation in practice remains heavily influenced by American practices.

1.3 The experience of the United States

It is generally presumed that the Sherman Act, which ushered in the 'modern' era of competition law, was a response to irresistible pressures exerted from the agricultural heartland of the United States: prices and wages were rising, yet farmers, faced with disproportionately higher freight costs set by the railway companies which combined to set standard rates, were not benefiting from the trend.

Section 1 of the Sherman Act prohibits ‘every contract, combination . . . or conspiracy in restraint of trade’ at a federal level (that is where inter-state trade would be affected). Decisions of the US Supreme Court have restricted these words, which would, if taken at face value, condemn nearly all business conduct to apply only to ‘unreasonable’ restraint of trade (*Standard Oil Co. of New Jersey v United States* (1911) 221 US 1). This ‘rule of reason’ is at the heart of American law, and there is intense debate as to the place of such a rule in EC law (see further at 9.7 below). Section 2 of the Act is in the following terms: ‘Every person who shall monopolize, or attempt to monopolize . . . any part of the trade or commerce among the several States . . . shall be guilty of a misdemeanor’. It is possible to argue that it is the legitimate goal of any businessman to ‘monopolize’ his industry, and in *United States v Grinnel Corp.* (1966) 384 US 563, a distinction was drawn between the ‘wilful’ acquisition of monopoly power, which fell to be condemned, and monopoly arising from better commercial practices which would escape the Act’s application. Although it has been supplemented by other legislation over the last century, which is discussed elsewhere in this book as appropriate, the Sherman Act remains central to antitrust policy in the United States (see generally Sullivan, E. T. (ed.), *The Political Economy of the Sherman Act: The First One Hundred Years*, New York, OUP (1991)). Given that economic principles do not, unlike law, vary from country to country, there are often good reasons to look to the large body of American case law to illuminate competition cases brought elsewhere. There are, however, significant divergences in the underpinning philosophies of the American and European regimes, and principles from one regime should not be slavishly applied to the other without good justification:

Many valuable ideas for the interpretation of Community law can be derived from the discussions going on on the other side of the Atlantic and from the solutions found by the American courts. However, prudence must be counseled in transferring concepts and theories from one legal system to the other. There are substantial differences between the various elements going to make up US law and those going to make up Community law, with the result that not every problem confronting one of the two systems finds a counterpart in the other legal system. (Advocate General Kirschner in *Tetra Pak Rausing SA v Commission* case T-51/89 [1991] 4 CMLR 334 at 343–4)

1.4 Economics and competition law

Economics can be employed in two main ways in relation to competition law. First, because competition law is aimed in part at remedying market failure a general macro-economic argument can be made as to the existence of such market failure and the costs imposed by it. Secondly, micro-economic arguments are likely to be relied upon in each individual case to justify intervention or to defend a company’s position. Attempts to avoid the ‘problem’ of economics are likely to result in bad law—as was the case with the Restrictive Trade Practices Act 1976, which adopted

an overly legalistic approach in an attempt to disregard economic issues. In Chapters 8 and 13 specific issues relating to collusion between firms and to actions by individual firms are considered in more detail and in Chapter 18 the economics of mergers is discussed. This section introduces the general argument advanced to support intervention and some standard economic terms.

For readers who are interested in developing their economic expertise further a good accessible text that deals with competition strategy is Besanko, D., Dranove, D., and Sharley, M., *Economics of Strategy*, New York, John Wiley & Sons (2nd edn, 2000). Specific references later in this text are given to Bishop and Walker, *The Economics of EC Competition Law*, because of its direct connection to the subject matter of this book. A recent American text, Hylton, K. M., *Antitrust Law: Economic Theory and Common Law Evolution*, Cambridge, Cambridge University Press (2003) superbly links the substantive application of US law to economic theory.

1.4.1 The problem of standards

As was noted above, it is the presumed goal of entrepreneurs to maximize their profits, and to be as successful as possible. While Bill Gates probably did not envisage 25 years ago that Microsoft would become one of the largest and most profitable corporations in the world, if asked he would probably have said that he would like it to. Now that it has assumed such a strong position Microsoft's commercial practices have been scrutinized by competition authorities around the world, and practices that might be pursued legitimately by smaller firms may be condemned if followed by Microsoft. The managers of a business may determine a strategy for all the 'right' reasons as far as that business is concerned, and yet, on the basis of a test related to society's welfare, be attacked. To what standards then are businesses to conform? Competition law is often contrasted with environmental regulation. For any given standard in environmental law (e.g., 'mercury content to be no more than three parts per million') it is a relatively easy matter to test for any given sample whether the standard is indeed being broken. It is much harder to set similar tests in the area of competition law.

In the United States 'monopolization' is condemned (see above); in the European Community the standard of conduct for a monopolist is that it should not 'abuse' its 'dominant position' (see Chapter 14). It will be impossible to determine whether this standard is being breached without recourse to economic analysis. Amongst other things the regulator or plaintiff must consider: what the relevant market is (e.g., is the market for bananas discrete, or is it part of the market for soft fruit, or all fruit?—*United Brands Co. v Commission* case 27/76 [1978] 1 CMLR 429); is the firm a monopolist?; is the alleged 'abuse' in fact a legitimate business tactic?; what effect is the alleged abuse having?

1.4.2 Industrial economics and markets

The area of economics that is most important for competition law is industrial economics, which is the branch of the science that applies micro-economic tools, such as an individual's preferences for apples over pears, or the costs of making a chair instead of a table, to wider market situations. Markets are where producers and consumers interact, and in a theoretical world of 'perfect' competition a market will produce an efficient result. Efficiency has a particular meaning in economics. An efficient position is one in which the only way to make anyone better off is to make someone else worse off. This is to say it refers to a situation in which no more mutually advantageous bargains or contracts can be made. In any situation in which A can be made better off, with B being no worse off, it will be efficient for that transaction to take place. Such a situation is referred to as one of *pareto optimum*. This theoretical ideal permits an examination of the extent to which observed market structures diverge from 'perfect competition' and the resulting harm. The requirements of perfect competition are that there must be very large, tending to infinite, numbers of producers and of consumers. The product is homogenous so that there are no significant differences between one producer's product and the next. Both producers and consumers are perfectly informed about the market and are motivated by the desire to maximize profits and satisfaction. When added to various assumptions made about the costs of production, the result is that no consumer or producer is able to influence the price of the product, and that the price at which the item is sold exactly matches the cost of making it. In observed markets these assumptions break down: consumers and producers will be able to influence the price of products, which are not homogenous, and neither group is likely to have perfect information about the market place. The antithesis of perfect competition is monopoly, with 'monopolistic', or imperfect, competition lying somewhere between the two.

When an economist uses the term 'monopoly' it has a specific meaning, different from that put forward by Coke's *Institutes* (above). A monopoly market is one in which there is only one producer. It is frequently pointed out by those questioning the basis of much of competition regulation that the most common situation in which monopoly arises is where it is the product of government action (e.g., by legal controls limiting entry into an industry, in particular where the state regulates an industry). Empirical observation suggests, in particular, that monopolies, even where they do exist, are unable to remain monopolies in the long run unless they are protected by legislative barriers to entry.

A monopolist, unlike a firm in a perfectly competitive market, has the power to determine the price at which the product is sold. Adam Smith, whose *The Wealth of Nations* (1776) serves as the basis of modern economics, suggested that 'the price of monopoly is upon every occasion the highest which can be got'. The monopolist can achieve this by choosing how much of the product to supply.

1.4.2.1 *The adverse consequences of monopolies*

Ceteris paribus ('all other things being equal') prices are higher, and output less, in markets which are monopolistic than in markets which are perfectly competitive. A consequence of the steps taken to achieve this is that it results in a non-optimal allocation of resources, by sending the 'wrong' signals as to the value/cost of products. The monopolist, by raising prices above the production cost of an item, denies consumers who are in fact prepared to pay that cost the opportunity of doing so. The monopolist has, by raising the price of the product, sent the consumer a false signal about the true value of the product in relation to other products and less consumer demand is therefore satisfied under these conditions. Further, the money that would have been spent on the monopoly product is instead spent on other products thereby raising *their* prices and the market becomes distorted.

Another issue is that of 'consumer surplus'. If a monopolist can set only one price for a product, as is the usual case in competitive market conditions, a given number of consumers will buy the product. For one of these consumers the decision has been a marginal one, and had the price been any higher the purchase would not be made. Some of the other consumers might have been prepared to pay for more, and have, in effect, achieved savings on the purchase. Consider, for example, an item in a sale—one consumer might buy it only because it has been reduced in price, while another might have been quite happy to pay the full price and feel that they have got a bargain. The total amount of this 'saving' is known as the consumer surplus. If the monopolist could force each consumer to pay their maximum price the total revenue to the monopolist rises and the consumer surplus vanishes, which represents a transfer of income from the consumers to the monopolist. This issue is often dealt with in competition law under the heading of 'price discrimination' (see Chapter 16). It is not directly a matter that impinges upon the efficiency of the situation, but it is nevertheless of legitimate interest to a regulator concerned with the distribution of income.

In 1954, in an article which has assumed seminal importance but has led to a somewhat difficult and convoluted debate, Arnold Harberger attempted to quantify the total loss to American society from the monopolistic industries in the United States (Harberger, A. C., 'Monopoly and Resource Allocation', (1954) 44 *American Economic Review* 77). Harberger estimated the difference between the total consumer demand satisfied under competitive conditions, and the reduced demand satisfied under monopoly conditions (the 'welfare triangle', or 'Harberger triangle'). In fact Harberger's estimate was only 0.1 per cent of the national income. More recent studies, however, point to figures of between 4 per cent and 20 per cent, suggesting that Harberger's estimate is an understatement and may be seen as a lower boundary.

The strategic activity undertaken to achieve, or reinforce, a monopoly position ('rent seeking') may also represent a cost of monopolies. This might include excessive advertising that has no benefit in terms of increased sales, and aggressive competition that does not increase either consumer or producer welfare. The

intense British Airways/Virgin Atlantic competition of the mid- to late 1990s is sometimes cited as an example of such conduct.

1.4.3 The policy debate—Harvard v Chicago, and the new industrial economics

Until the mid-1980s competition economists, regulators, and to a certain extent lawyers, could be placed into two broad camps: the Harvard school and the Chicago school. Although the crude divisions these labels suggest have largely broken down under the influence of more modern economic analysis, there remains some value in the distinction, and it is still common to find these labels applied either to personalities or to approaches. The debate is not an abstract one as the policy implications of the ideas advanced by each school are very different. As will be seen in Chapter 13, if the Chicago school adherents are correct there is no need for regulators to consider anti-competitive conduct such as ‘predation’; if the Harvard school supporters are correct, it may be right for regulators to intervene in such situations.

The first major school of thought to develop emerged at Harvard University when, in the 1930s, researchers conducted analyses of specific industries. Their conclusions led to the Structure–Conduct–Performance model (SCP): performance is determined by firms’ conduct, which is in turn determined by the market structure. Kaysen and Turner, for example, consistent with the general distrust of corporate America and large business that was widely shared at the time, argued that the limitation of market power should be the central focus of competition policy and that market power should be reduced wherever this could be done without a corresponding cost in the performance of the industry (Kaysen, C., and Turner, D. F., *Antitrust Policy: An Economic and Legal Analysis*, Cambridge, Mass., Harvard UP (1959)).

One of the first practices that the Chicago school and notably Stigler examined, was that of the welfare implications of the structure of an industry, and of barriers to entry into that industry. Where the Harvard economists had argued that higher barriers enabled incumbents to increase prices, and were therefore prima facie to be condemned, the Chicagoans are concerned to examine the nature of the barrier, tolerating those which are the result of efficiency considerations. The SCP, Harvard model is replaced by one in which performance dictates market structure—the ‘reverse causation’ argument. In other words, monopolistic industries are the result of efficiency and superior performance, and should not then be attacked precisely because the firms in them have succeeded. Thus Bork has argued that the real question for competition policy is whether ‘artificial’ barriers, not being the result of more efficient production or economies of scale, prevent the effective operation of the market (Bork, R. H., *The Antitrust Paradox*, New York, The Free Press (1993)). More generally it is the tendency of the Chicago school to accept that, in the real world, the model of perfect competition can be used to explain most business behaviour, which is to say that all companies are constrained by competition.

Alongside this sits the general assumption of the school that the only concern of competition policy should be the attainment of efficiency, and that ancillary 'non-economic' goals such as the equitable distribution of income, or the socio-political problems of a concentration of economic power should not be a part of any competition policy. For a recent text following a Chicagoan line see Gordon, R. L., *Antitrust Abuse in the New Economy*, Cheltenham, Edward Elgar, 2002.

The Chicagoan assumption that real-world behaviour will tend to match that forecast by the perfect competition model is now being subject to increasingly rigorous challenges with the emergence of the new (or 'modern') industrial economics, which is informed in part by the empirical evidence provided in various antitrust actions. It appears to be now well established that the competitive assumptions made by some of the more extreme Chicagoans are incorrect, and are not supported by evidence. The standard-bearers of the Chicagoan viewpoint in America over more recent years have been R. H. Bork and R. A. Posner, both of whom were appointed to the bench under the Republican presidencies, and who remain in a position to exercise some considerable influence over the debate in America. Bork's *The Antitrust Paradox* (above) is a highly entertaining polemic, and provokes much debate, although it now lags behind contemporary economic argument. Posner's record in adjudicating antitrust actions in his time on the bench has been examined by American commentators and found lacking. Again it has been noted that he has disregarded strong evidence, characterized by some economists as incontrovertible, to the effect that concentration in any industry is almost inevitably damaging to consumer welfare.

The more pragmatic line taken by the new industrial economics is that in a monopolistic market, where the expected benefits outweigh the likely costs, a profit-maximizing firm will engage in strategic behaviour. For adherents to the new industrial economics one of the roles of competition policy is to make the expected costs of such strategic behaviour sufficiently great to outweigh the expected benefits, thereby deterring such conduct.

Broadly, the aims of competition policy are in line with the new industrial economics, although generalizations as to the aims of the various regimes are dangerous (see further Chapter 2). As was noted above, the aim of competition policy is not to achieve perfect competition as an alternative to monopoly. The definition of competition more usually accepted by regulatory authorities is that of the 'workable competition' first discussed by J. M. Clark in 1940 (30 *American Economic Review* 241). Workable competition accepts that there are elements of monopoly in virtually all markets, and has, as its goal, making such structures compatible with strong competition. It therefore contains an element of pragmatism that courts find more attractive than more rigorous economic models (see, e.g., *Metro-SB-Grossmärkte GmbH & Co. KG v Commission* case 26/76 [1978] 2 CMLR 1).

It should be noted, too, that an increasing emphasis on the impact of technology on industrial development is leading to some new approaches to markets and industry being developed (see, e.g., Sutton, J., *Technology and Market Structure*, Boston, MIT Press (1999)).

1.4.4 Basic tools of economic analysis

There is less controversy surrounding the basic tools of economics than there is about the policy implications of different market structures. The Harvard and Chicago schools alike are in agreement as to these components. Markets represent the aggregation of individual elements, and there will be situations in competition law where these individual elements become important in determining the existence of anti-competitive behaviour, and in resolving other economic issues, such as the ability of a monopolist to raise prices, or the existence of other products that restrict the monopolist's power.

1.4.4.1 Demand, supply, and price

In a free market economy the price of any product is set by the relationship between the demand for the product and the supply of the product. *Ceteris paribus*, the greater the supply, and the less the demand, the less the price of the product will be. The demand for a product is the sum of the demand of individual consumers. In all save a few cases a consumer's individual demand for a product will be inversely related to its price, and can be represented diagrammatically as a 'curve' that slopes downwards from left to right (see Figure 1.1). The 'elasticity of demand', references to which are often encountered in competition cases, is the extent to which demand is sensitive to price. An inelastic demand curve denotes that consumers are unresponsive to changes in price: if price rises by 10 per cent demand falls by *less* than 10 per cent. The more inelastic demand is, therefore, the

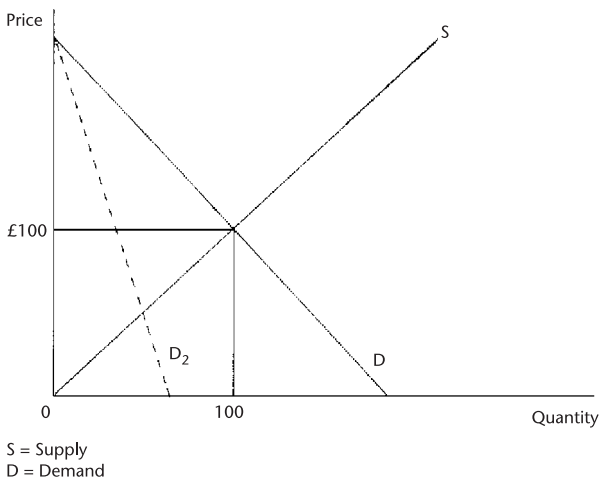


Figure 1.1 Demand and supply curves

Note: The price at which the product is sold, and the quantity sold, will be that where the demand and supply curves intersect. Demand curve D_2 is less elastic than D ; if these two curves are looked at in isolation it will be seen that a change in price (from, e.g., £100 to £150) will have a bigger effect on D than on D_2 .

more a monopolist will be able to raise prices and still increase their income. It may be presumed that petrol has an inelastic demand. If the demand for petrol was in fact elastic the government would not be able to raise significant revenue by taxation on petrol, for any increase in tax would be more than matched by a drop in sales. An elastic demand curve denotes that consumers are very responsive to changes in price: if price rises by 10 per cent demand falls by *more* than 10 per cent, and in such a situation a monopolist raising prices will find that income will fall. Any product that has many substitutes is likely to have an elastic demand. The demand for compact discs is probably inelastic, but the demand for any individual disc will be more elastic. Thus if the price of all discs were to rise by 10 per cent, sales would probably not fall by as much as 10 per cent, but if The Sugababes' new CD was priced at 20 per cent more than any other disc, consumers might prefer to purchase an alternative from the wide range stocked by any music store. Supply curves slope upwards left to right, showing that the relationship between supply and price is that, *ceteris paribus*, the higher the price the greater the level of supply. The price of the product, the quantity supplied, and the quantity bought will be that set where demand and supply curves intersect.

As suggested above, the demand for a product will also be affected by the prices of *other* products, which is termed 'cross-elasticity of demand' or 'substitutability'. An examination of substitutability is almost essential in determining the boundaries of any given product market. If demand for one product is highly sensitive to the price of another (e.g., clementines and mandarins) it is probably unwise to treat the market for clementines as being a separate one distinct from the market for mandarins. Producers and retailers of clementines will have to be always considering what is happening in the market for mandarins. Analysis of substitutability accordingly features prominently in many competition cases. This is just one area in which the language of business may differ from the language of competition law. The sales or marketing director of any business may have a very clear view of the market that is being targeted by that business, but, if subject to a competition investigation, a very different definition of the market (often but not always a wider one) may be adopted.

1.4.4.2 Costs

Certain competition law issues cannot properly be resolved without an analysis of the costs faced by the company concerned. This is true of allegations of predation, where the charge is that the business is making losses or acting primarily with the intention of driving a competitor out of the market, or of preventing entry into the market, and of allegations of 'profiteering' where the company is accused of making too much profit (see Chapters 13 and 16).

Costs of production can be separated out in various ways. The primary divisions made by economists are between fixed and variable costs; marginal, average, and total costs; and short-run and long-run costs. Consider the example of a mass-produced motor car. In the short run fixed costs are those that stay constant whatever the level of production (e.g., the rent on the factories and perhaps

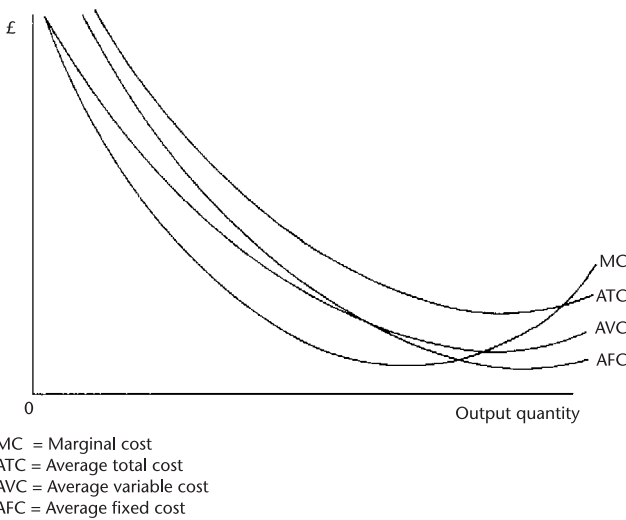


Figure 1.2 Cost curves

Note: This figure assumes that there are economies of scale, so marginal and variable cost fall first. Once these economies are exhausted costs will begin to rise again.

research and development); variable costs alter according to the level of production (e.g., the cost of steel, plastics, and labour). Marginal costs are those of the additional unit of production (the cost of making one extra car). Generally marginal costs fall as production rises through the operation of ‘economies of scale’. Economies of scale are the benefits that arise from producing more of any item. It is, for example, cheaper to produce the tenth motor car in a mass-production plant than it is to produce the first, and the 10,000th will be considerably cheaper still. Where there are economies of scale, the average cost, which is the total cost divided by the quantity produced, will fall as output rises. In the long run there may be significant differences and the concept of fixed costs in particular becomes less definite, for even factories can be disposed of. The various cost curves are shown in Figure 1.2. Supply of a product will be determined by the costs of production and the demand for the product.

1.4.4.3 Markets

The definition of a ‘relevant market’ is essential to several aspects of competition law. Markets are where consumers and suppliers of a product or service interact. As was mentioned above (at 1.4.4.1) it may, for the purposes of rigorous analysis, be necessary to determine whether product A competes with product B. This is particularly important in the case of investigations into abuses of a dominant position, as we need to know in respect of what the undertaking is believed to be dominant. For example, is there a market for bus services? If there is it might be possible to apply the laws of dominance to a bus company that has a strong market

position in a given area. On the other hand, if bus services compete strongly with rail and taxi services, with walking, and with the use of private cars, then it would probably not be possible to apply the law. As indicated above the most important factor here is that of the extent to which products are interchangeable one for the other.

The test favoured by competition authorities is the SSNIP test (which is discussed further at 14.2.4). This asks what the effect would be on product A of a Small but Significant Non-transitory Increase in Price of product A by a hypothetical monopolist. To put this another way: if all of A were to be produced by one supplier, and the price of A were to rise by 5–10 per cent, and the price of all other products stayed constant, what would happen to the demand for A? In all save the most extreme circumstances *some* customers at least will switch to another product as they would be at the margin of the demand for product A. Other customers would accept a substantial price rise, while still remaining loyal to A. The question is whether the income lost from those customers who defect is more than compensated for by an increase in income from those remaining. Or to put it more simply still, would the price rise be profitable? If such a price rise would be profitable we assume that there is a market for A. If it would not be we need to determine to which products customers are switching most readily, and include those in the SSNIP test (i.e., run the same hypothetical exercise on the assumption that products A and B are controlled by the same supplier). This exercise can be more than merely hypothetical as sales data may provide many answers. For example, if there is an unexpected heat wave in October, and sales of ice cream rise, it might be possible to determine whether sales of cold canned drinks have fallen—which might imply a degree of substitutability between the two products. In other circumstances this exercise can be more difficult, and the SSNIP test may fail to produce an accurate result. This is most clearly the case where there is an existing monopolist who has behaved intelligently. A monopolist is expected to raise the price of their product to the highest profitable level. Were the price to rise any further in such a case it would lead to losses, and might suggest to the unwary that the market was wider than for the monopolist's product. If there was a single supplier of bicycles and the price was raised to the maximum profitable level it might be that a further price rise would push some customers towards purchasing motorcycles, although it is highly unlikely that these are in the same relevant market. Such a mistake was made by the US Supreme Court in the case of *United States v E I duPont* 351 US 377 (1956). Here the court found that there was not a market for cellophane, as were the price to rise profits would fall. It is widely accepted that the court was wrong, as it started from a position where prices had *already* risen above the competitive level to the monopoly level. This danger is now known as the 'cellophane fallacy', or 'cellophane trap'.

Further factors in defining relevant markets, and the importance of doing so in the areas of agreements, single firm conduct, and mergers, are dealt with as appropriate throughout this text.

1.4.5 Barriers to entry

The implications of barriers to entry are that their existence reinforces monopolistic tendencies in a market. Theoretical models of market structure focus only on *actual* competition facing producers, and make no reference to *potential* competition. It has long been recognized that potential competition serves as a restraint on the conduct of incumbents (those already in the market) in just the same way as does the actual competition faced. The higher the barriers that exist, the greater is the ability of the incumbent to ignore the potential competition.

While the existence of barriers to entry in any given situation may be a matter of some concern to those investigating the market, there is intense debate between the Harvard and Chicago schools as to the policy implications of barriers to entry, and even as to what a barrier to entry is. The issue is of such importance that it should be dealt with at this early stage. At its very broadest, a barrier to entry is any factor that operates as a cost of a new entrant into a market. By this definition it might include such factors as: lack of knowledge about the market; any premium rate paid for capital to compensate for the risk this lack of knowledge results in; the cost of acquiring the necessary physical capacity (plant and raw materials); the cost of establishing brand recognition with consumers, and a distribution system, etc.

Whether all barriers to entry should be a matter of concern to competition regulation is contested. Some barriers are the result of the success of the incumbent (e.g., the need to develop brand loyalty) and it may be argued that if the incumbent has had to overcome this hurdle it is, or has been over time, in no better a position than any potential entrant. In fact these still reinforce the power of the incumbent, but some (notably Chicagoans) argue that such barriers should be of no concern to regulators and are merely evidence of the efficiency of the incumbent. Adherents of the Harvard school would permit competition policy to examine *any* barrier, and in some circumstances to impose positive obligations on incumbents to reduce barriers. In an extreme case this could, for example, take the form of restricting their product lines so as to allow a niche for the entrant, or to allow entrants access to the incumbent's established distribution network. Such policies are likely to face severe resistance from businesses that have led the way into a market and succeeded, and whose officers are often perplexed at the demands made on them by the law.

All commentators would accept that barriers that result from governmental action are a source of legitimate concern, although such barriers will often be justified on the grounds of health and safety, or may be accompanied by ongoing industry regulation that will ameliorate the consequence of the market power granted to the incumbent.

1.4.6 Conclusion

Unfortunately the analysis conducted by the various regulatory authorities is often somewhat lacking in formal rigour, and the EC Commission decisions have in

particular been criticized for lacking in-depth economic analysis. In its *Green Paper on Vertical Restraints* (see Chapter 9) the EC Commission argued that

economic theory is just one of the sources of policy. In practice, the application of economic theory must take place in the context of the existing legal texts and jurisprudence. Secondly, economic theories are necessarily based on simplifying assumptions often obtained in the context of stylised theoretical models that cannot take into account all the complexities of real life cases. (para. 86)

It might plausibly be argued that, if an economic theory based on simplifying assumptions has been tested and refined against empirical data, that theory could serve as a legal test and is at least as likely to produce reliable results as is a pragmatic individual analysis of each case.

Care should be taken over the way in which economic 'evidence' is used in competition cases. While economic consultants will regularly be employed to advance arguments in competition cases, and in many cases their evidence will be determinative of the issues, there are some dangers with constructing elaborate economic 'stories' to explain observed conduct. An illustration of the problems may be found in the UK case of *Napp Pharmaceutical Holdings Ltd v The Director General of Fair Trading* [2002] CompAR 13. Napp was condemned for discriminatory predatory pricing in one sector of its market (the case is discussed in full in Chapter 16). Its economic consultants, Nera, produced an argument to the effect that the undertaking was rationally pricing low in one sector as this ensured follow-through sales in another sector, and that this 'portfolio' pricing was a legitimate and profitable strategy that was available to all its competitors as well. The Competition Commission Appeals Tribunal (CCAT), which heard the case, found no suggestion in the documents produced by Napp that it had in fact been consciously following such a strategy. The Tribunal noted that 'Napp does not strike us as a naïve or badly managed company', and argued that 'if its pricing policy had in fact been seen by Napp in the way that its economic consultants suggest, we would have expected the company's internal documents to demonstrate that' (para. 252).