Office of Fair Trading

# Assessment of market power

Understanding competition law

Competition law 2004

Since 1 May 2004 not only the European Commission, but also the Office of Fair Trading (OFT) has the power to apply and enforce Articles 81 and 82 of the EC Treaty in the United Kingdom. The OFT also has the power to apply and enforce the Competition Act 1998. In relation to the regulated sectors the same provisions are applied and enforced, concurrently with the OFT, by the regulators for communications matters, gas, electricity, water and sewerage, railway and air traffic services (under section 54 and schedule 10 of the Competition Act 1998) (the Regulators). Throughout the guidelines, references to the OFT should be taken to include the Regulators in relation to their respective industries, unless otherwise specified.

The following are the Regulators:

- the Office of Communications (OFCOM)
- the Gas and Electricity Markets Authority (OFGEM)
- the Northern Ireland Authority for Energy Regulation (OFREG NI)
- the Director General of Water Services (OFWAT)
- the Office of Rail Regulation (ORR), and
- the Civil Aviation Authority (CAA).

Section 52 of the Competition Act 1998 obliges the OFT to prepare and publish general advice and information about the application and enforcement by the OFT of Articles 81 and 82 of the EC Treaty and the Chapter I and Chapter II prohibitions contained in the Competition Act 1998. This guideline is intended to explain these provisions to those who are likely to be affected by them and to indicate how the OFT expects them to operate. Further information on how the OFT has applied and enforced competition law in particular cases may be found in the OFT's decisions, as available on its website from time to time.

**This guideline is not a substitute for the EC Treaty nor for regulations made under it. Neither is it a substitute for European Commission notices and guidelines. Furthermore, this guideline is not a substitute for the Competition Act 1998 or the Enterprise Act 2002 and the regulations and orders made under those Acts. It should be read in conjunction with these legal instruments, Community case law and United Kingdom case law. Anyone in doubt about how they may be affected by the EC Treaty, the Competition Act 1998 or the Enterprise Act 2002 should seek legal advice.**

In addition to its obligations under Community law, when dealing with questions in relation to competition within the United Kingdom arising under Part I of the Competition Act 1998, the OFT will act in accordance with section 60 of that Act.

# Contents


| Part | | Page |
|---|---|---|
| **1** | Introduction | 2 |
| **2** | Appreciable effect and dominance | 5 |
| **3** | A framework for assessing market power | 9 |
| **4** | Market shares | 11 |
| **5** | Entry barriers | 15 |
| **6** | Other factors in the assessment of market power | 24 |

# 1 Introduction

**1.1** The EC Treaty[1] and the Competition Act 1998 (the Act) both prohibit agreements[2] which prevent, restrict or distort competition and conduct which constitutes abuse of a dominant position. EC Regulation 1/2003 (the Modernisation Regulation)[3] requires the designated national competition authorities of the Member States (NCAs) and the courts of the Member States to apply and enforce Articles 81 and 82 of the EC Treaty (Article 81 and Article 82 respectively) as well as national competition law when national competition law is applied to agreements which may affect trade between Member States or to abuse prohibited by Article 82. A more detailed explanation of the Modernisation Regulation is set out in the competition law guideline *Modernisation* (OFT442).

**1.2** The concept of market power is not part of the statutory framework of the EC Treaty or the Act, but it is a useful concept in assessing potentially anti-competitive agreements or conduct. This guideline explains how the OFT will assess whether undertakings[4] possess market power when investigating cases under Articles 81 and 82 and sections 2(1) and 18(1) of the Act (the 'Chapter I prohibition' and 'Chapter II prohibition' respectively).

**1.3** Market power arises where an undertaking does not face effective competitive pressure. Both suppliers and buyers can have market power. However, for clarity, market power will usually be referred to here to describe supplier market power. Where buyer market power is the issue, the term **buyer power** is employed. Market power and buyer power are not absolute, but are matters of degree; the degree of power will depend on the circumstances of each case.

**1.4** Market power can be thought of as the ability profitably to sustain prices above competitive levels or restrict output or quality below competitive levels. An undertaking with market power might also have the ability and incentive to harm the process of competition in other ways; for example, by weakening existing competition, raising entry barriers or slowing innovation. However, although market power is not solely concerned with the ability of a supplier to raise prices, this guideline often for convenience refers to market power as the ability profitably to sustain prices above competitive levels.

[1] The Treaty establishing the European Community.

[2] References in this guideline to **agreements** should be taken to include decisions by associations of undertakings (see footnote 5 below) and concerted practices, unless otherwise stated or the context demands it.

[3] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty (OJ L1, 4.1.03, p 1).

[4] The term **undertaking** is not defined in the EC Treaty or the Act, but its meaning has been set out in Community law. It covers any natural or legal person engaged in economic activity, regardless of its legal status and the way in which it is financed. It includes companies, partnerships, firms, businesses, individuals operating as sole traders, agricultural cooperatives, associations of undertakings (e.g. trade associations), non profit making organisations and (in some circumstances) public entities that offer goods or services on a given market

**1.5** Market power can exist in a variety of contexts, some of which are discussed in this guideline. In some markets, a single undertaking may possess market power. In others where, for example, a number of undertakings have agreed explicitly or tacitly not to compete with each other, a group of undertakings may collectively possess market power.

**1.6** The approach described in this guideline is not a mechanical test, but a conceptual framework within which evidence can be organised. It is not possible to give a prescriptive guide to market power since whether and the extent to which it exists will depend on the circumstances of each case.

**1.7** An assessment of market power generally involves considering a wide range of relevant evidence on market definition[5], market structure, entry conditions, the behaviour of undertakings and their financial performance before coming to a view of market power.

[5] See the competition law guideline *Market definition* (OFT403).

## Layout of this guideline

**1.8** Part 2 of this guideline describes why the assessment of market power can be useful under Article 81 and the Chapter I prohibition of the Act in considering the **appreciability** test (i.e. the appreciability of the effect on competition) and why it is central under Article 82 and the Chapter II prohibition in the identification of **dominance**. Although the concepts of appreciable effect and dominance are different, it is helpful in both cases to consider the competitive constraints that act on the undertaking (or undertakings). This guideline refers to these constraints as the factors which affect whether or not undertakings have market power.

**1.9** Parts 3 to 6 of this guideline address theory and evidence relevant in the assessment of market power. Part 3 sets out a framework for assessing market power. Part 4 considers how to measure market shares, noting that they need to be considered in the context of other factors (such as entry barriers) before they are used as indicators of market power.

**1.10** Part 5 considers various types of entry barrier and how they may be assessed in practice. Part 6 considers other factors that are important in the assessment of market power such as buyer power, evidence of excessive prices and profits and economic regulation.

# 2 Appreciable effect and dominance

**2.1** This part describes why the assessment of market power can be useful in considering the concepts of **appreciability** and **dominance** in competition law.

## Appreciability under Article 81 and the Chapter I prohibition

**2.2** An agreement will infringe Article 81 or the Chapter I prohibition only if it has as its object or effect an appreciable prevention, restriction or distortion of competition within:

- the common market in the case of Article 81, or
- the United Kingdom or a part of it in the case of the Chapter I prohibition.

Further details are provided in the competition law guideline *Agreements and concerted practices* (OFT401).

### Market power

**2.3** If it is clear that none of the parties to an agreement possesses market power (either individually or collectively) and that market power would not arise as a result of the agreement, it is unlikely that the OFT will take further action unless it is considering a price fixing, market sharing or bid rigging agreement[6].

[6] See the competition law guideline *Article 81 and the Chapter I prohibition* (OFT401).

**2.4** Relevant factors in the assessment of market power include market shares, entry conditions, and the degree of buyer power from the undertaking's customers (which may include distributors, processors and commercial users). These factors are discussed in Parts 3 to 6 of this guideline.

### Administrative priority

**2.5** It is the OFT's practice to consider, on a case by case basis, whether an agreement falls within its administrative priorities so as to merit investigation.

### Calculating market shares

**2.6** When applying the market share thresholds, the relevant market share will be the combined market share not only of the parties to the agreement, but also of other undertakings belonging to the same group of undertakings as the parties to the agreement. These will include, in the case of each party to the agreement, undertakings over which they exercise control and undertakings that exercise control over them (and any other undertakings that are controlled by those undertakings).

## Dominance under Article 82 and the Chapter II prohibition

**2.7** Article 82 and the Chapter II prohibition prohibit conduct by one or more undertakings which amounts to the abuse of a dominant position within:

- the common market in the case of Article 82, or
- the United Kingdom or a part of it in the case of the Chapter II prohibition.

**2.8** The European Court has defined a dominant market position as:

> 'a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of consumers[7].'

[7] Case 27/76 *United Brands v Commission* [1978] ECR 207. This definition has been used in other cases.

**2.9** The OFT considers that an undertaking will not be dominant unless it has **substantial market power**.

**2.10** Market power is not an absolute term but a matter of degree, and the degree of market power will depend on the circumstances of each case. In assessing whether an undertaking has substantial market power, it is helpful to consider whether and the extent to which an undertaking faces competitive constraints. Those constraints might be existing competitors, potential competitors and other factors such

as strong buyer power from the undertaking's customers. These constraints are discussed further in Parts 3 to 6 of this guideline.

### Market shares

**2.11** There are no market share thresholds for defining dominance under Article 82 or the Chapter II prohibition. An undertaking's market share is an important factor in assessing dominance but does not determine on its own whether an undertaking is dominant. For example, it is also necessary to consider the position of other undertakings operating in the same market and how market shares have changed over time. An undertaking is more likely to be dominant if its competitors enjoy relatively weak positions or if it has enjoyed a high and stable market share.

**2.12** The European Court has stated that dominance can be presumed in the absence of evidence to the contrary if an undertaking has a market share persistently above 50 per cent[8]. The OFT considers that it is unlikely that an undertaking will be individually dominant if its share of the relevant market is below 40 per cent, although dominance could be established below that figure if other relevant factors (such as the weak position of competitors in that market and high entry barriers) provided strong evidence of dominance.

[8] Case C62/86 *AKZO Chemie BV v Commission* [1991] ECR I-3359.

## Collective dominance under Article 82 and the Chapter II prohibition

**2.13** Article 82 and the Chapter II prohibition prohibit conduct on the part of 'one or more' undertakings that amounts to the abuse of a dominant position. Conduct by undertakings within the same corporate group which are not considered to operate as a single economic unit may be treated together under Article 82[9]. A dominant position may be held collectively (a **collective dominant position**) when two or more legally independent undertakings are linked in such a way that they adopt a common policy on the market.

[9] The behaviour of undertakings that operate as a single economic unit within the same corporate group will however usually be treated as that of a single undertaking (see the competition law guideline *Agreements and concerted practices* (OFT401).

**2.14** The European Court confirmed the principle of collective dominance in the 'Italian Flat Glass' case:

> 'There is nothing, in principle, to prevent two or more independent economic entities from being, on a specific market, united by such economic links that, by virtue of that fact, together they hold a dominant position vis-à-vis the other operators on the same market'[10].

[10] Case T-68/89 etc *Società Italiano Vetro SpA v Commission* [1992] II ECR 1403.

**2.15** The links may be structural or they may be such that the undertakings adopt a common policy on the market. For example, the nature of the market may mean that undertakings might adopt the same pricing policy on the market without ever explicitly agreeing on price[11]. This is sometimes called **tacit coordination**.

[11] Case C396/96 *Compagnie Maritime Belge Transports v Commission* [2000] ECR I-1365 at paragraph 45.

**2.16** Tacit coordination requires that undertakings are able to align their behaviour in the market. It also requires that:

- each undertaking is able to monitor the compliance of the other undertakings with the common policy (i.e. transparency),
- the undertakings have incentives to maintain coordinated behaviour over time, so that coordination is sustainable (e.g. because deviations from the common policy are easy to detect and punish), and
- the foreseeable reactions of current and future competitors, as well as of customers, would not jeopardise the results expected from the common policy (e.g. new entrants, 'fringe' undertakings[12] or powerful buyers could not successfully challenge the common policy)[13].

[12] A 'fringe' undertaking is one not participating in the coordinated behaviour.

[13] See the judgment in Case T-342/99 *Airtours plc v Commission* [2002] ECR II-2585.

# 3 A framework for assessing market power

**3.1** Market power can be thought of as the ability profitably to sustain prices above competitive levels or restrict output or quality below competitive levels. An undertaking with market power might also have the ability and incentive to harm the process of competition in other ways; for example, by weakening existing competition, raising entry barriers or slowing innovation. However, although market power is not solely concerned with the ability of a supplier to raise prices, this guideline often refers to market power for convenience as the ability profitably to sustain prices above competitive levels[14].

**3.2** When assessing whether and to what extent market power exists, it is helpful to consider the strength of any **competitive constraints**, i.e. market factors that prevent an undertaking from profitably sustaining prices above competitive levels.

**3.3** Competitive constraints include:

- **Existing competitors** - 'Existing competitors' are undertakings already in the relevant market[15]. If an undertaking (or group of undertakings) attempts to sustain prices above competitive levels, this might not be profitable because customers would switch their purchases to existing competitors. The market shares of competitors in the relevant market are one measure of the competitive constraint from existing competitors. It can also be important to consider how the market shares of undertakings in the market have moved over time. Market shares are discussed further in Part 4 of this guideline
- **Potential competition** - This refers to the scope for new entry. Where entry barriers are low, it might not be profitable for one or more undertakings in a market to sustain prices above competitive levels because this would attract new entry which would then drive the price down – if not immediately, then in the long term. Entry barriers are the subject of Part 5 of this guideline
- **Buyer power** - Buyer power exists where buyers have a strong negotiating position with their suppliers, which weakens the potential market power of a seller. This is discussed further in Part 6 of this guideline.

[14] Where market power is exercised with the effect that quality, service or innovation is reduced, customers can be thought of as paying higher prices for a given level of quality, service or innovation, thus deriving poorer value for money than competition would deliver.

[15] Where supply side substitution is likely, existing competitors include undertakings that would move very quickly into the market without incurring substantial sunk costs. See the competition law guideline *Market definition* (OFT403).

**3.4** Economic regulation is a further relevant factor when assessing market power in industry sectors where, for example, prices and/or service levels are subject to controls by the government or an industry sector regulator. While economic regulation is not a competitive constraint in itself, it can limit the extent to which undertakings can exploit their market power[16]. This is also discussed further in Part 6 of this guideline.

**3.5** Evidence about the behaviour and financial performance of undertakings is also relevant. Where there is direct evidence that, over the long term, prices substantially exceed relevant costs or profits substantially exceed competitive levels, this may point to market power. Behaviour and performance are dealt with further in Part 6.

**3.6** For analytical clarity, this approach sets out the various indicators of market power as if they were separate. In practice, however, the factors are often related. Available evidence from all indicators will be considered in the round before coming to an assessment on market power.

[16] Note, however, that the existence of regulation does not necessarily preclude a finding that, for example, the conduct of a dominant undertaking constitutes an abuse of a dominant position - see, for example, the judgment of the Competition Commission Appeal Tribunal in *Napp Pharmaceutical Holdings Limited and Subsidiaries v Director General of Fair Trading* [2002] CAT 1 at paragraph 411 *et seq.*

# 4 Market shares

**4.1** As part of the framework for assessing market power, the OFT will usually define the market and assess how market shares have developed over time[17]. This part considers the extent to which market shares indicate whether an undertaking possesses market power, how market shares may be measured, the sort of evidence likely to be relevant, and some potential problems. These issues are important when considering the intensity of existing competition.

[17] The OFT's approach to market definition is set out in the competition law guideline *Market definition* (OFT403).

## Market shares and market power

**4.2** In general, market power is more likely to exist if an undertaking (or group of undertakings) has a persistently high market share[18]. Likewise, market power is less likely to exist if an undertaking has a persistently low market share. Relative market shares can also be important. For example, a high market share might be more indicative of market power when all other competitors have very low market shares.

[18] See, for example, *Aberdeen Journals Limited v Office of Fair Trading (No. 2)* [2003] CAT 11 at paragraphs 309 to 310.

**4.3** The history of the market shares of all undertakings within the relevant market is often more informative than considering market shares at a single point in time, partly because such a snapshot might not reveal the dynamic nature of a market. For example, volatile market shares might indicate that undertakings constantly innovate to get ahead of each other, which is consistent with effective competition. Evidence that undertakings with low market shares have grown rapidly to attain relatively large market shares might suggest that barriers to expansion are low, particularly when such growth is observed for recent entrants.

**4.4** Nevertheless, market shares alone might not be a reliable guide to market power, both as a result of potential shortcomings with the data (discussed in the next section) and for the following reasons:

- **Low entry barriers** - An undertaking with a persistently high market share may not necessarily have market power where there is a strong threat of potential competition. If entry into the market is easy, the incumbent undertaking might be constrained to act competitively so as to avoid attracting entry over time by potential competitors (see Part 5).

- **Bidding markets** - Sometimes buyers choose their suppliers through procurement auctions or tenders. In these circumstances, even if there are only a few suppliers, competition might be intense. This is more likely to be the case where tenders are large and infrequent (so that suppliers are more likely to bid), where suppliers are not subject to capacity constraints (so that all suppliers are likely to place competitive bids), and where suppliers are not differentiated (so that for any particular bid, all suppliers are equally placed to win the contract). In these types of markets, an undertaking might have a high market share at a single point in time. However, if competition at the bidding stage is effective, this currently high market share would not necessarily reflect market power.
- **Successful innovation** - In a market where undertakings compete to improve the quality of their products, a persistently high market share might indicate persistently successful innovation and so would not necessarily mean that competition is not effective[19].
- **Product differentiation** - Sometimes the relevant market will contain products that are differentiated. In this case undertakings with relatively low market shares might have a degree of market power because other products in the market are not very close substitutes.
- **Responsiveness of customers** - Where undertakings have similar market shares, this does not necessarily mean that they have similar degrees of market power. This may be because their customers differ in their ability or willingness to switch to alternative suppliers (see also the discussion of buyer power in Part 6).
- **Price responsiveness of competitors** - Sometimes an undertaking's competitors will not be in a position to increase output in response to higher prices in the market. For example, suppose an undertaking operates in a market where all undertakings have limited capacity (e.g. are at, or close to, full capacity and so are unable to increase output substantially). In this case, the undertaking would be in a stronger position to increase prices above competitive levels than an otherwise identical

[19] For example, effective competition in innovation might mean that, in order to stay ahead of its rivals, the market leader must improve its products and processes on a regular basis. Innovation as a way to overcome entry barriers is discussed in Part 5.

undertaking with a similar market share operating in a market where its competitors were not close to full capacity.

**4.5** Therefore, while consideration of market shares over time is important when assessing market power, an analysis of entry conditions and other factors is equally important. All relevant factors will be viewed in the round.

## Measuring market shares

### Evidence

**4.6** Data on market shares may be collected from a number of sources including:

- information provided by undertakings themselves. Undertakings are usually asked for data on their own market shares, and to estimate the shares of their competitors,
- trade associations, customers or suppliers who may be able to provide estimates of market shares, and
- market research reports.

**4.7** The appropriate method for calculating market shares depends on the case in hand. Usually sales data by value and by volume are both informative. Often value data will be more informative, for example, where goods are differentiated.

**4.8** The following issues may arise when measuring market shares:

- **Production, sales and capacity** - Market share is usually determined by an undertaking's sales to customers in the relevant market. Market share is normally measured using sales to direct customers in the relevant market rather than an undertaking's total production (which can vary when stocks increase or decrease). Sometimes market shares will be measured by an undertaking's capacity to supply the relevant market: for example, where capacity is an important feature in an undertaking's ability to compete or in some instances where the market is defined taking into account supply side considerations[20].

[20] See the competition law guideline *Market definition* (OFT403).

- **Sales values** – When considering market shares on a value basis, market share is valued at the price charged to an undertaking's direct customers. For example, when a manufacturer's direct customers are retailers, it is more informative to consider the value of its sales to retailers as opposed to the prices at which the retailers sell that manufacturer's product to final consumers.
- **Choice of exchange rates** – Where the relevant geographic market is international, this may complicate the calculation of market shares by value, as exchange rates vary over time. It may then be appropriate to consider a range of exchange rates over time, including an assessment of the sensitivity of the analysis to the use of different exchange rates.
- **Imports** - If the relevant geographic market is international, market shares will be calculated with respect to the whole geographic market. If the relevant geographic market is not international, it is possible that imports will account for a share of that market. If so, and if information is available, the sales of each importing undertaking are usually considered and market shares calculated accordingly, rather than aggregating shares as if they were those of a single competitor. Where the relevant geographic market is domestic, the share of an undertaking that both supplies within and imports into that market[21] would usually include both its domestic sales and its imports.
- **Internal production** – In some cases, a supplier may be using some of its capacity or production to meet its own internal needs. In the event of a rise in price on the open market, the supplier may decide to divert some or all of its 'captive' capacity or production to the open market if it is profitable to do so, taking into account effects on its downstream business that is now deprived of the captive supply. The extent to which 'captive' capacity or production is likely to be released onto the open market (or might otherwise affect competition on the open market) will be taken into account in assessing competitive constraints.

[21] This includes situations where the undertaking in question is part of the same group as an importer into that market.

# 5 Entry barriers

**5.1** This Part considers barriers to entry and expansion and how they may be assessed in practice.

**5.2** Entry barriers are important in the assessment of potential competition. The lower are entry barriers, the more likely it is that potential competition will prevent undertakings already within a market from profitably sustaining prices above competitive levels.

**5.3** Entry barriers are factors that allow an undertaking profitably to sustain supra-competitive prices in the long term, without being more efficient than its potential rivals. If it currently faced no existing competitors, an undertaking could not sustain supra-competitive prices in the long term in the absence of entry barriers.

**5.4** An undertaking even with a large market share in a market with very low entry barriers would be unlikely to have market power. However, an undertaking with a large market share in a market protected by significant entry barriers is likely to have market power.

**5.5** Entry barriers arise when an undertaking has an advantage (not solely based on superior efficiency) over potential entrants from having already entered the market and/or from special rights (e.g. to production or distribution) or privileged access to key inputs. Entry barriers may make new entry[22] less likely or less rapid by affecting the expected sunk costs of entry and/or the expected profits for new entrants once they are in the market, or by establishing physical, geographic or legal obstacles to entry[23].

**5.6** There are many ways in which different types of entry barrier can be classified, but it is useful to distinguish between the following factors which, depending on the circumstances, can contribute to barriers to entry:

- sunk costs
- poor access to key inputs and distribution outlets
- regulation
- economies of scale

[22] New entry into a market requires that both a new undertaking is established in the industry and that new productive capacity is set up in that industry.

[23] For the purposes of this guideline, entry barriers include not only those factors that prevent new entry entirely but also those that impede (without necessarily preventing) new entry.

- network effects, and
- exclusionary behaviour[24].

**5.7** Most of the following examples refer for simplicity to a situation where there is one incumbent already in the market[25] and one potential entrant or 'rival'. Although in reality the existence of several incumbents and several potential entrants may complicate the analysis, the principles outlined remain valid.

## Sunk costs

**5.8** Entry will occur only if the expected profit from being in the market exceeds any sunk costs of entry[26].

**5.9** Sunk costs of entry are those costs which must be incurred to compete in a market, but which are not recoverable on exiting the market[27]. When a new entrant incurs sunk costs when entering a market, it is as if that entrant has paid a non-refundable deposit to enable it to enter[28].

**5.10** Sunk costs might give an incumbent a strategic advantage over potential entrants. Suppose an incumbent has already made sunk investments necessary to produce in a market while an otherwise identical new entrant has not. In this case, even if the incumbent charges a price at which entry would be profitable (if the price remained the same following entry), entry may not occur. This would be the case if the entrant does not expect the post-entry price to be high enough to justify incurring the sunk costs of entry[29].

**5.11** It is useful to consider the extent to which sunk costs give an incumbent undertaking an advantage over potential new entrants and to what extent sunk costs might affect entry barriers[30]. The mere existence of sunk costs in any particular industry, however, does not necessarily mean that entry barriers are high or that competition within the market is not effective.

[24] Exclusionary behaviour does not refer only to behaviour that raises entry barriers. Exclusionary behaviour also refers to practices that make it harder for existing competitors to become more forceful competitors, including practices which lead to the elimination of an existing competitor.

[25] This gives the incumbent a '**first-mover advantage**': an advantage from being in the market before its rival.

[26] Note that the expected profit from being in a market would also account for the possibility that exit occurs and that any associated 'exit costs' are incurred.

[27] For example, suppose an entrant to a hypothetical market for long distance coach services in the North of England purchases a fleet of vehicles. On exiting that market it might be able to sell its coaches to another undertaking (e.g. one offering coach services in the South of England) and so some of the initial costs are recoverable and not sunk. However, not all of the expenditure will be recoverable. For example, any expenditure on the undertaking's livery is unlikely to be of use to another company. This latter expenditure is therefore sunk.

*Coninued on page 17*

## Poor access to key inputs and distribution outlets

**5.12** Entry barriers may arise where inputs or distribution outlets are scarce, and where an incumbent obtains an advantage over a potential entrant due to privileged access (or special rights) to those inputs or outlets.

### Essential facilities

**5.13** At one extreme, an incumbent might own or have privileged access to an essential facility, which its rival does not. Although the assessment of whether a particular facility is essential must be on a case-by-case basis, essential facilities are rare in practice. A facility will only be viewed as essential where it can be demonstrated that access to it is indispensable in order to compete in a related market and where duplication is impossible or extremely difficult owing to physical, geographic or legal constraints (or is highly undesirable for reasons of public policy). Generally if a rival does not have access to an essential facility, it cannot enter the market.

**5.14** There will be circumstances in which difficulties accessing inputs or resources constitute an entry barrier without those assets or resources meeting the strict criteria required to be defined as 'essential facilities'.

### Intellectual property rights

**5.15** Intellectual property rights (IPRs) can be entry barriers, although this is not always the case. In particular, when an IPR does not prevent others from competing with the IPR holder in the relevant market, it would not normally be a barrier to entry. In those cases where IPRs do constitute a barrier to entry, it does not always imply that competition is reduced. Although an IPR may constitute an entry barrier in the short term, in the long term a rival undertaking may be able to overcome it by its own innovation. The short term profit which an IPR can provide acts an incentive to innovate and can thus stimulate competition in innovation.

*Continued from page 16*

[28] Where undertakings can determine their own sunk costs, these are sometimes called 'endogenous' sunk costs. For example, the non-recoverable components of spending on advertising and on research and development (R&D) are endogenous sunk costs. These might be used to differentiate products by brand image and/or by quality (see 5.35).

[29] Provided entry would not drive prices below average avoidable cost, the incumbent would find it profitable to remain in the market following entry. Knowing this, the potential entrant decides to stay out of the market.

[30] In the economics literature there are many models which describe how an incumbent might use sunk costs strategically to deter entry or, if entry is accommodated, reduce the share of the market available to the new entrant. Some examples are given below in the discussion of exclusionary behaviour.

## Regulation

**5.16** Regulation may affect barriers to entry. For example, regulation may limit the number of undertakings which can operate in a market through the granting of licences. Also, licences may be restricted so that there is an absolute limit to the number of undertakings that can operate in the market. In this case a licence can be thought of as a necessary input before production can take place and so regulation will act as an entry barrier[31].

**5.17** Sometimes regulation sets objective standards. Where these apply equally to all undertakings, such as health and safety regulations, they might not affect the cost for new entrants any more than they affect the cost for incumbents. However, regulation can lead to entry barriers when it does not apply equally to all undertakings. For example, incumbents might lobby for standards that are relatively easy for them to meet, but harder for a new entrant to achieve.

## Economies of scale

**5.18** Economies of scale exist where average costs fall as output rises[32]. In the presence of large economies of scale, a potential entrant may need to enter the market on a large scale (in relation to the size of the market) in order to compete effectively. Large scale entry might require relatively large sunk costs and might be more likely to attract an aggressive response from incumbents[33]. These factors may in some circumstances constitute barriers to entry.

**5.19** Attaining a viable scale of production may take time and so require the new entrant to operate in the market for some time at a loss. For example, a new entrant at the manufacturing level might need to secure many distribution outlets to achieve a viable scale. If, perhaps due to long term contracts, many input suppliers or distributors are locked-in to dealing with the incumbent, the new entrant might not be able to achieve an efficient scale of production over the medium term. This could deter entry.

**5.20** Even when entry is not completely deterred, entrants may take time to achieve efficient levels of production, obtain the relevant

[31] If licences were tradeable in a competitive market, a potential entrant could purchase a licence and enter the market if a profitable opportunity arose. However, entry by one undertaking would require exit by another and so overall output might not rise. Therefore, the fact that the licences are limited might allow those undertakings in the market to sustain prices above competitive levels even though licences were tradeable.

[32] Economies of **scope** mean that it costs less to produce two types of products together than to produce them separately. Economies of scope may have similar implications to economies of scale, as a potential entrant would prefer to enter the market with many as opposed to few products.

[33] See paragraph 5.25.

information, raise capital and build the necessary plant and machinery. In this case, even if entry occurs, the incumbent could nevertheless retain market power for a substantial period of time.

## Network effects

**5.21** Network effects occur where users' valuations of the network increase as more users join the network. For example, as new customers enter a telephone network, this might add value to existing customers because they would be connected to more people on the same network. If customers benefit from being on the same network (e.g. due to incompatibility with other networks), an incumbent with a well established network might have an advantage over a potential entrant that is denied access to the established network and so has to establish its own rival network.

**5.22** Network effects, just like economies of scale, may make new entry harder where the minimum viable scale (e.g. in terms of users of the network) is large in relation to the size of the market.

## Exclusionary behaviour

**5.23** The term 'exclusionary behaviour' refers to anti-competitive behaviour which harms existing or potential competition: for example, by eliminating efficient competitors or raising barriers to entry and expansion. The following paragraphs set out some examples of how exclusionary behaviour can create barriers to entry.

### Predatory response to entry

**5.24** An undertaking contemplating entering a market weighs up its expected profit from being in the market with the expected sunk costs of entering. Expected profits from being in the market may depend on how the entrant expects the incumbent to react when it enters the market: the potential entrant might believe that the incumbent would, for example, reduce prices substantially if it entered and so reduce the prospective profits available.

**5.25** While low prices are generally to be encouraged, if a new entrant expected an incumbent to respond to entry with predatory prices, this could deter entry. For example, if an incumbent has successfully predated in the past, it may have secured a reputation for its willingness to set predatory prices[34]. Any future potential entrants to this market (or to any other market where the incumbent operates) might then be deterred from entering due to the likelihood of facing an aggressive response[35].

### Vertical restraints

**5.26** In general, vertical restraints are provisions made between undertakings operating at different levels of the supply chain which restrict the commercial freedom of one or more parties to the agreement. Many vertical restraints may be beneficial or benign, especially if there is effective competition at both the upstream and downstream levels. However, vertical restraints may also affect entry barriers.[36]

**5.27** For example, a manufacturer might have a series of exclusive purchasing agreements with most retailers in a particular geographic market. This might limit the ability of a new manufacturer to operate on a viable scale in that market and therefore deter entry.

### Other exclusionary practices

**5.28** Discounts designed to foreclose markets, margin squeezes, and refusals to supply might also be used in a way that raises entry barriers.

## Assessing entry barriers

**5.29** Assessing the effects of entry barriers and the advantages they give to incumbents can be complex. A variety of steps may be involved. For example, incumbents and potential entrants might be asked for their views on: the sunk costs associated with a commitment to entry; the relative ease of obtaining the necessary inputs and distribution outlets; how regulation affects the prospect of entry; the

[34] In *Aberdeen Journals (No. 2)*, the Competition Appeal Tribunal accepted that Aberdeen Journals' predatory reaction to the launch of a rival newspaper would have been likely to deter others from seeking to enter the market.

[35] Another example might be where an incumbent sinks costs in a way that sends a credible signal as to how it would behave if another undertaking decided to enter a market: it might 'over-invest' in sunk assets so that when it operated as the only undertaking in the market, it had significant spare capacity. From the potential entrant's point of view, the mere existence of that capacity might imply that the incumbent would 'flood' the market in response to entry. The entrant might then decide not to enter if it believed that the incumbent was likely to respond to entry by lowering the price to a low level where the entrant would earn insufficient revenue to cover its sunk costs.

[36] For a further discussion see the competition law guideline *Vertical agreements* (OFT419).

cost of operating at the minimum viable scale; and any other factors that may impede entry or expansion in the market.

**5.30** Claims that potential competition is waiting in the wings are more persuasive if there is fully documented evidence of plans to enter a market or where hard evidence of successful entry in the recent history of the market is provided. In the latter case, such evidence might include a historical record of entry into the market (or closely related markets), including evidence that new entrants had attained in a relatively short period of time a sufficient market share to become effective existing competitors.

**5.31** It is important, but not necessarily straightforward, to assess the time that may elapse before successful entry would occur. Some producers, most likely those in neighbouring markets, may be able to enter speedily (e.g. in less than a year) and without substantial sunk costs by switching the use of existing facilities. Where this is possible, it will sometimes be taken into account in defining the market (as supply-side substitutability: see the competition law guideline *Market definition* (OFT403))[37]. New entry from scratch tends to be slower than entry from a neighbouring market, for a variety of reasons which depend on the market concerned – obtaining planning permission, recruiting and training staff, ordering equipment, appointing distributors and so on. The nature of the market may also limit the times at which entry may occur. For example, where customers award long-term contracts, a potential entrant may have to wait until these contracts are renewed before it has an opportunity to enter the market. It may also be important to assess whether enough contracts would come up for renewal to allow the entrant to attain a viable scale.

**5.32** Sometimes the relevant geographic market will be international. Where this is not the case, foreign suppliers may nevertheless exert a constraint on domestic undertakings, in the absence of entry barriers, as potential competitors. However, trade barriers – whether tariff or non-tariff – are an example of a barrier to entry that could impede international competition and shield market power.

[37] Some rivals will be able to enter the market more quickly and with a smaller sunk investment than others. Whether this is classified as supply side substitution or new entry should not make a difference to the assessment of market power. Ultimately what matters are the competitive constraints, not the way in which they are classified.

**5.33** Growth, or prospective growth, of a market will usually have a bearing on the likelihood of entry: entry will usually be more likely in a growing market than in a static or declining one because it will be easier for an entrant to achieve a viable scale, for example by selling to new customers.

**5.34** In markets where products are differentiated, undertakings compete not only on price but also on features such as quality, service, convenience and innovation. Where there is scope for differentiation, this may facilitate entry, for example where a new entrant targets untapped demand by differentiating itself from incumbents (provided that incumbents have not already pre-empted all possible niches in the market).

**5.35** In markets where brand image is important, a new entrant may have to invest heavily in advertising before it can attain a viable scale. However, even where advertising expenditure is a sunk cost, this does not necessarily mean that entry barriers are high. For example, incumbents may have had to establish their brands and may also have to advertise heavily to maintain them, and so will not necessarily have a cost advantage over potential entrants.

**5.36** The rate of innovation is also important: in markets where high rates of innovation occur, or are expected, innovation may overcome product market barriers to entry relatively quickly (provided that there are no barriers to entry into innovative activity). Indeed, any profits that result from an advantage created by successful innovation (e.g. from intellectual property rights) may be an important incentive to innovate.

## Barriers to expansion

**5.37** New entry is not simply about introducing a new product to the market. To be an effective competitive constraint, a new entrant must be able to attain a large enough scale to have a competitive impact on undertakings already in the market. This may entail entry on a small

scale, followed by growth. Barriers to entry are closely related to barriers to expansion and can be analysed in a similar way. Many of the factors discussed above that may make entry harder might also make it harder for undertakings that have recently entered the market to expand their market shares and hence their competitive impact.

# 6 Other factors in the assessment of market power

## Buyer power

**6.1** The strength of buyers and the structure of the buyers' side of the market may constrain the market power of a seller. Size is not sufficient for buyer power. Buyer power requires the buyer to have choice.

**6.2** The analysis of buyer power requires an understanding of the way that buyers interact with suppliers. Buyer power is most commonly found in industries where buyers and suppliers negotiate, in which case buyer power can be thought of as the degree of bargaining strength in negotiations[38]. A buyer's bargaining strength might be enhanced if the following conditions hold:

- the buyer is well informed about alternative sources of supply and could readily, and at little cost to itself, switch substantial purchases from one supplier to another while continuing to meet its needs[39]
- the buyer could commence production of the item itself or 'sponsor' new entry by another supplier (e.g. through a long-term contract) relatively quickly and without incurring substantial sunk costs
- the buyer is an important outlet for the seller (i.e. the seller would be willing to cede better terms to the buyer in order to retain the opportunity to sell to that buyer)
- the buyer can intensify competition among suppliers through establishing a procurement auction or purchasing through a competitive tender (see Part 4).

**6.3** In general, buyer power is beneficial in two circumstances:

- when there are large efficiency gains that result from the factors (e.g. size) that give the buyer its power and these are passed on to the final consumer (e.g. through downstream competition), and

[38] Another form of buyer power occurs where, under certain conditions, a dominant purchaser from a competitive industry would have an incentive to withhold purchases in order to buy at a lower price.

[39] This need not mean that the buyer stops buying the product entirely, just that it reduces purchases by a substantial amount. This may include ceasing to promote the product in question and promoting the products of rival suppliers instead. Reducing purchases of a must-have product might not be profitable for a buyer. However, where suppliers produce must-have products and other, less important, products the buyer might exercise power by threatening to de-list a weaker product unless it obtains better terms on the must-have product.

- when it exerts downward pressure on a supplier's prices and the lower prices are passed on to the final consumer.

**6.4** However, buyer power does not always benefit the final consumer. First, where only some buyers are powerful, for example, a supplier with market power might harm downstream competition through actions which lead to weaker buyers facing higher input prices. Second, buyer power might be weakened as a result of the agreement or behaviour under investigation. Third, where the buyer also has market power as a seller in the downstream market, it may not pass on lower prices to the final consumer. Fourth, conduct by a dominant buyer may harm competition. A careful analysis of vertical relationships in the market, on a case-by-case basis, is therefore often required to assess buyer power[40].

[40] Article 82 and the Chapter II prohibition prohibit abuses of buyer power by dominant undertakings. An agreement between customers to suppress prices would be likely to fall within Article 81 and/or the Chapter I prohibition.

## Evidence on behaviour and performance

**6.5** An undertaking's conduct in a market or its financial performance may provide evidence that it possesses market power. Depending on other available evidence, it might, for example, be reasonable to infer that an undertaking possesses market power from evidence that it has:

- set prices consistently above an appropriate measure of costs, or
- persistently earned an excessive rate of profit.

**6.6** High prices or profits alone are not sufficient proof that an undertaking has market power: high profits may represent a return on previous innovation, or result from changing demand conditions. As such, they may be consistent with a competitive market, where undertakings are able to take advantage of profitable opportunities when they exist. However, persistent significantly high returns, relative to those which would prevail in a competitive market of similar risk and rate of innovation, may suggest that market power does exist. This would be especially so if those high returns did not stimulate new entry or innovation.

## Economic regulation

**6.7** In some sectors the economic behaviour of undertakings (such as the prices they set or the level of services they provide) is regulated by the government or an industry sector regulator, and an assessment of market power may need to take that into account. Although an undertaking might not face effective constraints from existing competitors, potential competitors or the nature of buyers in the market, it may still be constrained from profitably sustaining prices above competitive levels by an industry sector regulator. However, that is not to say that market power cannot exist when there is economic regulation. It is feasible, for example, that regulation of the average price or profit level across several markets supplied by an undertaking may still allow for the undertaking profitably to sustain prices above competitive levels in one (or more) of these markets and/or to engage in exclusionary behaviour of various kinds[41].

[41] See, for example, *Napp* at paragraph 411 *et seq.*

## Competition law guidelines

The OFT is issuing a series of competition law guidelines. New guidance may be published and the existing guidance revised from time to time. For an up-to-date list of guidance booklets check the OFT website at www.oft.gov.uk

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