

The role of market definition in monopoly and dominance inquiries

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PREFACE

This paper was commissioned by the Office of Fair Trading (OFT) from National Economic Research Associates (NERA). NERA were asked to undertake some research to address whether market definition remained relevant in relation to monopoly and dominance and how any ensuing problems of market definition might be resolved.

Any views expressed in this paper are those of the authors and they do not necessarily reflect the views of the Director General of Fair Trading. The paper is not and should not be treated as a guideline issued as a consequence of the Director General's obligation to publish general advice and information under the Competition Act 1998.

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1 INTRODUCTION

- 1.1 This report, prepared by National Economic Research Associates (NERA), examines the role that market definition plays in the assessment of monopoly and dominance inquiries. Although the definition of the relevant market has always played a role in the application of UK competition law, the introduction of the Competition Act 1998 in March 2000 has increased its importance, particularly with respect to the application of Chapter II, as UK competition law is brought into line with EC competition law.
- 1.2 The increasing importance assumed by the definition of the relevant market raises an important issue of how relevant markets should be defined both in theory and in practice. There is now growing consensus that the hypothetical monopolist test provides the appropriate framework for defining relevant markets. However, this does not imply that defining relevant markets is always a straightforward task. Indeed, experience shows that this is rarely the case and that a detailed case-by-case assessment is usually required. Moreover, the difficulties of defining the relevant market in Article 82 investigations, and by extension in Chapter II investigations, are compounded by the existence of what is commonly termed the cellophane fallacy.¹ The cellophane fallacy implies that an unthinking application of the hypothetical monopolist test (a test originally formulated in the context of merger control) will tend to result in relevant markets being defined too broadly. In consequence, the use of market shares in such cases will tend to understate the market strength of the firm under investigation.
- 1.3 This report considers the implications that the cellophane fallacy has for the practical role that market definition can play in the assessment of dominance and the analysis of abuse. We argue that the existence of the cellophane fallacy does not imply the need for a new framework for defining relevant markets. Instead we argue that the relevant market assessment under Chapter II should be undertaken so as to ensure the following hold:
- all hypothesised market definitions are at least consistent with the principles of demand and supply-side substitution that underpin the SSNIP test;
 - all products claimed to be part of the same market as the products of the firm under investigation are at least substitutable at current prices;

¹ In the remainder of the paper whenever reference is made to Chapter II it should be taken to mean Chapter II of the Competition Act and Article 82 of the EC Treaty, unless otherwise specified.

- any assessment of the product characteristics of the products is rigorously undertaken and that only the most relevant characteristics are considered; and
- whenever possible, empirical evidence that is not tainted by the cellophane fallacy is used to shed light on the relevant market definition.

1.4 Nonetheless, the cellophane fallacy does raise legitimate concerns so that in many instances it will not be possible to discriminate objectively between competing definitions of the relevant market. For this reason, we argue that too much emphasis has been placed on the definition of the relevant market and too little on the question of dominance in the application of Article 82. We believe that in light of the difficulties that market definition raises in the context of dominance inquiries, the definition of the relevant market and any conclusions on dominance should play primarily a screening role to eliminate from consideration the activities of those firms that are not dominant under any plausible market definition and that Chapter II inquiries, and by analogous arguments Article 82 inquiries, should be focused on whether the conduct under investigation constitutes an abuse.

1.5 The remainder of this report is organised as follows. Chapter 2 of this paper provides a discussion of the standard market definition test and the role that market definition has played in merger cases and in monopoly and dominance cases. This discussion serves as background to the discussion of the 'cellophane fallacy' and the difficulties that this raises for market definition in non-merger settings. We then consider the 'cellophane fallacy', and explain why simple application of the standard market definition test may result in the definition of overly broad markets in dominance cases and describe the consequences that this has for the use of market definition and market share analysis as tools in the assessment of dominance.

1.6 In Chapter 3 we consider the process of identifying dominant firms and discuss some of the issues that are raised by the use of market definition in that process in the light of the 'cellophane fallacy'. In particular, we explore whether the hypothetical monopolist test might be modified to overcome the 'cellophane fallacy' problem, whether the concepts that underpin the standard test continue to have value even when the test cannot be strictly applied as an empirical tool because of 'cellophane fallacy' problems, and we discuss the use of the analysis of product characteristics in the absence of a robust empirical market definition test. This chapter then discusses whether it may be possible to infer dominance directly from observed market evidence and whether there is then any value in inferring a market definition from a direct finding of dominance, given that

market definition has traditionally been primarily a device for the indirect identification of dominance.

- 1.7 Chapter 4 then examines the role of the relevant market in analysing abuse. We argue that too much emphasis is currently placed on the role of market definition in assessing dominance and too little on understanding the actual economic effects of the business practice under investigation. We propose a framework for undertaking abuse of dominance investigations that, we believe, gives appropriate weight to the role of market definition in both the analysis of dominance and that of abuse. An annexe contains a hypothetical worked example that illustrates this approach.

2 THE RELEVANT MARKET IN DOMINANCE CASES

An overview of market definition

THE LEGAL RATIONALE FOR MARKET DEFINITION

- 2.1 Chapter II of the UK Competition Act 1998 ('the Act') prohibits dominant firms from abusing their market position. It closely mirrors EC law under Article 82 of the EC Treaty. Specifically, the Act states that:
- '... any conduct on the part of one or more undertakings which amounts to the abuse of a dominant position in a market is prohibited if it may affect trade within the United Kingdom.'*
- 2.2 Given the Act's requirement that its application is consistent with EC competition law, the definition of the relevant market plays an important role in the competitive assessment conducted under Chapter II.²
- 2.3 In European competition law the courts have consistently ruled that the Commission must define a market before a conclusion on the market position of the firm or firms under investigation can be reached. For example, in *Continental Can Co Inc. (Case 6/72 (1973) ECR 215)* the European Court held that a market must be defined before a dominant position can be found.
- 2.4 Moreover, notwithstanding the many other factors that can influence whether a firm has market power in a market and consequently whether it has the ability to act abusively, in EC law dominance has very largely come to be defined by reference to the market share of the firm or firms under investigation. Of course, in order to calculate market shares one must first define the market. In addition, identification of the market is necessary before one can sensibly analyse the nature of the assets needed to operate in the market and is therefore a necessary precursor of any meaningful discussion of barriers to entry. Consequently, the definition of the relevant market has become an important, if not critical, element in the assessment of dominance under Article 82 and hence also under Chapter II of the Act.³

² Section 60 of the Act sets out principles which provide for the UK authorities to handle cases in such a way as to ensure consistency with EC law.

³ The definition of the relevant market is also assuming greater importance under Article 81 of EC competition law and therefore it is likely that the definition of the relevant market will also become important in the application of Chapter I of the Act.

THE ANALYTICAL RATIONALE FOR MARKET DEFINITION

- 2.5 While the decisions of the Courts confirm the legal importance of the relevant market, they do not provide any guidance as to how the relevant market should be defined. The key economic concept to the investigation of abuse is market power. This implies that relevant markets need to be defined with reference to the most important sources of competition for a firm or set of firms. Defining the relevant market in this way allows the subsequent detailed competitive analysis to focus on the key elements of competition and how competition might be affected by the behaviour of the firms in the market.
- 2.6 It is important to recognise that the definition of the relevant market constitutes only a preliminary step in the assessment of abuse. In practice, the principal role played by the definition of the relevant market has been the calculation of market shares and indices of market concentration based upon those market shares.⁴ The value of market shares and concentration indices in competition analysis is derived from the view that it is the structure of a market that determines the conduct of the firms within that market and that this determines the nature of the market outcomes that will be observed. Thus, whilst it is market outcomes, such as the level of prices, that are the primary concern of competition authorities, market structure is seen as an important indicator of the likely nature of those outcomes.
- 2.7 Modern economic theory suggests that the relationship between the structure of a market and observed market outcomes may not be as straightforward as it would initially appear. Specifically, it is not clear that causation is necessarily uni-directional from market structure to market performance. Indeed, it may be that the nature of competition in a market and the structure of that market are determined endogenously.⁵
- 2.8 Nonetheless, despite doubts over the existence of a strong and causal link between structure and performance, there remains a widely held view that an analysis of market structure is a useful first step in any competition analysis. In particular, it is widely believed that firms with small market shares in a

⁴ For example competition authorities sometimes measure concentration by the Herfindahl-Hirschman index (HHI). The HHI is an index of market concentration that is computed by summing the squares of the market shares of individual participants. Unlike some other measures of concentration, such as the combined market share of the top three (C3) or five (C5) firms in the market, the HHI gives some feel for the distribution of the shares throughout the market.

⁵ For an excellent discussion, see Sutton (1991), *Sunk Costs and Market Structure: Price Competition, Advertising and the Evolution of Concentration*, MIT Press.

properly defined relevant market are unlikely to be able to engage in exploitative or exclusionary behaviour and that agreements into which such firms enter are unlikely to have adverse consequences for competition. Consequently the agreements and behaviour of firms with only small shares of their respective markets are generally viewed benignly.

- 2.9 However the converse need not hold since it is not necessarily the case that firms with a high share of a properly defined market are in a position to engage in anti-competitive behaviour. In consequence the existence of a high market share alone is not normally seen as sufficient reason to conclude that a firm enjoys significant market power. It is therefore inappropriate for the competitive assessment to be confined to issues of market definition (and by implication of dominance) alone. Rather, the identification of high market shares simply means that a case cannot be dismissed at an early stage and a more detailed analysis of the economic characteristics of the market and the nature of the allegations will be required.

Defining the Relevant Market

INTRODUCTION

- 2.10 Since the main practical purpose of market definition is to permit inferences about market power to be drawn from market shares, it is clear that for this to provide a proxy for market power, the relevant market needs to be defined with reference to competitive constraints that exist between products and areas. In recognition of this, although there are some minor differences in emphasis and detail the underlying approach to defining relevant markets is now common across most competition jurisdictions. This test has come to be known as the 'SSNIP test', after the wording of the formulation of the test in the US guidelines.⁶⁷ It is also commonly referred to as the 'hypothetical monopolist test'. That approach lies at the heart of the EC Commission's Notice on market definition and also in the OFT's formal guidelines on market definition under the Act.⁸

⁶ Department of Justice and Federal Trade Commission Horizontal Merger Guidelines, April 2, 1992.

⁷ SSNIP stands for 'small but significant non-transitory increase in price'. The SSNIP test is also known as the '5% test', after the quantitative threshold described in the test.

⁸ OFT 403, Market Definition, Office of Fair Trading, March 1999. The OFT guidelines on market definition state that the SSNIP test is one way of looking at market definition. We would argue that it is the most appropriate way.

THE SSNIP TEST

- 2.11 The application of the SSNIP test begins by considering the products or services of the type supplied by the firm under investigation and asking whether a hypothetical monopolist with control over all of these products would be able profitably raise the price of those products permanently by 5-10%, assuming that the price of all other goods remained constant. If the answer to that question is yes, then this set of products defines a relevant market and competition between suppliers of those products provide the main sources of competitive constraint. If the answer is no, then this implies that suppliers of other products also provide important competitive constraints. A market is defined as the smallest set of products that meets the SSNIP test. In other words the SSNIP test defines a market as the smallest set of products worth monopolising.
- 2.12 In general, any market defined under the SSNIP test will have two dimensions. There will be a product market dimension and a geographic market dimension (e.g. a market might be defined as the supply of mineral waters in the UK). If a set of products, defined in both product and geographic terms, would not be worth monopolising because prices could not profitably be raised by 5-10% then the market, as defined, would need to be widened to include the next closest substitute products or geographic areas. It would then be necessary to reapply the SSNIP test to an expanded set of products and/or area. For example, if a hypothetical monopoly supplier of mineral waters in the UK would not be able to raise prices by 5-10% then the SSNIP test would be re-applied to a wider set of products including, for example carbonated soft drinks, and/or to a wider area.
- 2.13 Whether or not a 5-10% relative price increase for a specified set of products and areas might be profitable depends on the sales volumes that would be lost following such a price increase. Whenever prices of a set of products are raised it is likely that some sales will be lost. The key issue is whether the loss of sales would be sufficient to offset the increased profits that would be made from retained sales following the price rise. For example, if a 5% price increase leads to a reduction in sales volumes of less than 5% then the price rise will be unambiguously profitable. If a 5% price rise led to a 4% reduction in sales volumes, then revenues would rise by 0.8%. Since volumes are lower it is also likely that total costs will be lower and so such a relative price increase would be profitable. If, on the other hand, the 5% price rise were met with an 8% reduction in volumes, total revenues would fall by 3.4%. Whether or not the rise was profitable would then depend on the extent of any cost savings from the production of lower volumes.

- 2.14 Measuring the quantity of lost sales requires a case-by-case assessment and that assessment will generally focus on two aspects. First, the loss of sales will depend on the extent to which consumers consider other products as effective substitutes - so-called demand-side substitutes. Second, the loss of sales will also depend on the ability of productive assets outside the control of the hypothetical monopolist to be rapidly re-directed for the production of directly competing products – so-called supply-side substitutes.

Demand-side substitution

- 2.15 Demand-side substitution is the most obvious and often the most direct form of a competitive constraint between two products. It exists whenever a rise in the price of one product relative to the other would cause customers to switch their purchases from the product whose price has risen to the product whose relative price has fallen. For two products to be demand-side substitutes it is necessary not only for customers to be able to switch between them, but that they would actually do so in the event of a relative price change.
- 2.16 However, it is not necessary for all or even most customers to switch, or for those customers that do switch to switch all of their purchases. It is sufficient simply that enough switching takes place so that a 5% increase in price is not profitable. Furthermore it is not necessary for products to be identical or even very similar, in order for them to be demand-side substitutes. Indeed, it is possible for products with different physical characteristics to be seen as sufficiently substitutable by customers for them to be legitimately regarded as demand-side substitutes. For this reason, defining relevant markets solely with reference to physical characteristics will often lead to markets defined too narrowly.
- 2.17 In addition, for products to be effective demand-side substitutes does not require that they sell at the same price. It is possible for a low quality product trading at a relatively low price to be an effective demand-side substitute for a higher quality product trading at a relatively high price. What matters is the likely response of consumers and other suppliers to a change in that price differential. If the price of the high quality product rose, it is possible that customers who had previously been willing to pay a price premium for its superior quality would be unprepared to pay a yet higher premium. Conversely, customers who had been prepared to accept lower quality in return for a lower price may no longer be prepared to accept lower quality if the cost of trading up to a superior product is reduced by an increase in the price of the cheaper product. In those cases, high and low quality products would appear to be effective substitutes.

Supply-side substitution⁹

- 2.18 Supply-side substitution is a less obvious form of substitution, but under certain circumstances may be as effective as demand-side substitution. In essence two products are supply-side substitutes if the supplier of one of the products already owns all of the important assets needed to produce the other.
- 2.19 For example, a hypothetical monopoly supplier of plastic knives and forks is unlikely to be constrained from raising prices by the possibility of customers switching their purchases to plastic plates (i.e. plastic plates are not demand-side substitutes for plastic cutlery). Nonetheless, it may be that the assets of the plastic plate maker, such as the injection moulding equipment and distribution systems, could easily be used to make plastic knives and forks at short notice and without the need to make any significant new investments or incur any significant new risks. If that were the case, it is unlikely that a hypothetical monopolist of plastic knives and forks would be able to sustain a profitable price increase.
- 2.20 For a rival firm to provide a genuine source of supply-side substitution it is not sufficient for that firm to have just some of the assets required, if this means that significant additional investments are required in the other productive assets needed. For example, it may be possible for a firm physically to produce the products of another firm using pre-existing production assets, however, the successful sale of these products may also require marketing assets (e.g. an established brand) or distribution assets (e.g. depots). In this case, the ability to produce the physical product is insufficient to be able to regard the supplier as an effective source of supply-side substitution since the investments needed to create a brand and a distribution network are likely to be significant and largely sunk.¹⁰ Moreover, for the products of a firm to be regarded as supply-side substitutes it is not only necessary for production of the relevant products to be possible without the need for new investments, it must also be possible within a relatively short period of time. This is often taken as a period of up to one year.
- 2.21 In some cases, supply-side substitution is explicitly recognised in the product market definition. However, in many more cases it is implicitly recognised. For

⁹ Under US guidelines, considerations of supply-side substitution are not used to widen the definition of the relevant market but are used in the calculation of market shares. The practice in Europe differs in this regard.

¹⁰ A sunk investment is one that is irreversible. For example, assets that can be re-sold on exit from a market, such as offices, vehicles or multiple-use machinery are not sunk. Conversely, assets that cannot be sold on exit, such as industry-specific machinery or industry-specific brands, are sunk.

example, a strict demand-side analysis would place shoes of different sizes in different markets because no customers seeking size 5 shoes would switch to size 8 shoes in the event of a relative increase in the price of size 5s. Products of different sizes or made of different raw materials can often be grouped together in this way, not because they are substitutes from the customers' perspective, but because it is trivial for the production process to be modified to change the size or raw material composition of the output.

Conclusions on the SSNIP test

- 2.22 The SSNIP test has much to commend it. First, it provides a coherent framework within which to consider the relevant issues relating to the competitive constraints faced by firms under investigation. Its application requires one to address the competitive constraints that exist between various groups of products and various regions.¹¹ As a soundly based conceptual framework it can move the debate beyond a process of *ad hoc* introspection and focus it more clearly on the key concepts of demand and supply-side substitution.
- 2.23 It is important to recognise that although the test is formulated in a quantitative way (i.e. it considers the profitability of a 5-10% price rise across all products in the set), the value of the test lies in its role as a conceptual framework within which to view evidence of competition between products, rather than as a formal econometric test to be rigorously applied in all cases.
- 2.24 Second, and as importantly, the SSNIP test can in principle provide a hypothesis, the validity of which can in principle at least be examined by recourse to observed industry data. For example, in exploring the impact of a merger between two mineral water producers one may want to understand whether sparkling mineral water and still mineral water form part of the same relevant product market or whether they should be seen as separate product markets for this purpose. In examining this one would want to understand whether a relative increase in the price of sparkling mineral water would lead to a significant number of consumers switching from sparkling to still mineral water. This can be tested using a number of standard empirical techniques.¹² For example, one such test might be to examine the degree to which changes in the price of sparkling mineral water are reflected in changes in the price of still mineral

¹¹ Although many competition authorities have adopted market definition guidelines that advocate an approach based on the SSNIP test principles, it is quite another matter for those same competition authorities to abide by those principles in practice. Such departures represent in our view a significant lapse in public policy.

¹² For a discussion of these techniques, see Bishop and Walker, *The Economics of EC Competition Law*, Sweet & Maxwell 1999.

water. If the two products form part of the same relevant market then one might expect to see their prices move together over time. This is testable using historic market data.¹³ Thus, the SSNIP test and the concepts underpinning it provide a framework that, at least in principle, can allow one to test between competing market definition hypotheses.

The cellophane fallacy

DIFFERENCES BETWEEN MERGERS AND DOMINANCE INVESTIGATIONS

- 2.25 However, the application of many of these empirical techniques in the context of dominance/monopoly investigations raises a number of serious concerns. These concerns arise from the existence of the cellophane fallacy. Before discussing the cellophane fallacy, it is important to note a fundamental difference between the nature of analysis undertaken in merger inquiries and that undertaken in dominance inquiries.
- 2.26 In merger inquiries, the competitive concern is whether the merger will create or strengthen a dominant position – or to put it in economic terms - will the merger result in an increase in prices above the *prevailing level*? This is likely to be the case where a merger results in the elimination of an important competitive constraint on the current pricing behaviour of the merging parties. Hence, merger inquiries are *forward-looking* and are concerned with the identification of the competitive constraints that exist at *current prices*. In this context, market definition provides an appropriate framework within which the most important competitive constraints can be identified in a systematic manner.
- 2.27 In marked contrast to the forward-looking focus of merger inquiries, dominance inquiries are concerned with the current competitiveness of the markets in question. In such inquiries, the issue is whether the firm under investigation possesses the ability to act independently of competitors – or in economic terms - whether the firm already possesses market power.¹⁴ In making this assessment, one is interested in assessing whether the prevailing price is excessive and not with whether the firm is prevented from raising prices still further. As explained in the next section, this fundamental difference can, and in general will, imply that for a given industry the definition of the relevant market

¹³ The extent to which prices move together over time can be examined by calculating the correlation coefficient between two or more price series. A correlation of price movements is consistent with, although not proof of, two goods being in the same market.

¹⁴ Here we use the term market power to refer to those situations in which a firm is able to increase prices profitably above the competitive level. In most industries, the competitive level will *not* be defined by short run marginal cost.

for the assessment of a merger inquiry will differ from that which is relevant for the assessment of whether dominance exists in a Chapter II inquiry.¹⁵ Specifically, the relevant market for merger inquiries will be at least as wide as that appropriate for dominance inquiries.

DIFFICULTIES ARISING FROM THE APPLICATION OF THE SSNIP TEST IN DOMINANCE INQUIRIES

- 2.28 The difficulties with implementing the SSNIP test in many non-merger inquiries arise from the inherent difficulties in identifying the appropriate benchmark against which to apply the hypothetical price increase. Merger inquiries are concerned with the identification of those products that constrain the prices of the merging parties to their current level and it is therefore appropriate to ask whether products are substitutes at prevailing prices. Observable market evidence, notably evidence of substitution at prevailing prices and the identification of those products that benefit from substitution away from the products of the merging parties can be used to assess the magnitude of these competitive constraints.
- 2.29 The same cannot necessarily be assumed when examining whether current competitive constraints are effective in constraining prices to the competitive level rather than merely restraining them from rising further. In non-merger cases, it is no longer the case that prevailing prices necessarily provide the appropriate benchmark against which to assess the profitability of a further price rise. The problem arises because profit-maximising firms will always set their prices at a level at which a further price increase would be unprofitable.¹⁶ In other words, the degree of substitution between two products depends in large part upon the current relative prices of the products concerned. Consequently, the mere fact that at its current price an allegedly monopolised product faces effective competition from demand-side substitutes does not rule out the possibility that the firm producing the product possesses significant market power.
- 2.30 The alleged monopolist may only face demand substitutes at existing prices because it has already elevated its prices above the competitive level to the point at which those products become substitutes. Or, as was noted by the US courts in *US v Kodak*, if the price of the monopolised product is high enough even inferior substitutes will begin to look attractive to consumers. In other

¹⁵ For this reason, we would take issue with the recently introduced Danish competition law. This law states that the definition of the relevant market will be the same for both merger and dominance investigations.

¹⁶ Technically, prices will be set at a point at which demand for the product is elastic.

words, the identification of substitute products at prevailing prices does not mean that those products would necessarily have been substitutes for the products under investigation at the competitive price.

- 2.31 This potential problem is known in competition policy analysis as the *cellophane fallacy* after the celebrated *Du Pont* case. In that case, *Du Pont* argued that cellophane was not a separate relevant market since at prevailing prices cellophane could be shown to have a high cross-price elasticity of demand with flexible packaging materials such as aluminium foil, wax paper and polyethylene. But, as many commentators have since noted, these products can only be regarded as providing effective competitive constraints preventing Du Pont from increasing the price of cellophane above competitive levels if the prevailing price is the competitive price. The US Supreme Court failed to recognise that a high own-price elasticity and the identification of effective substitutes at prevailing prices may merely be the result of the exercise of existing market power.

A HYPOTHETICAL EXAMPLE OF THE CELLOPHANE FALLACY

- 2.32 The difficulties that arise in the practical implementation of the SSNIP test in dominance inquiries can be illustrated using the following hypothetical example of rail travel. Suppose, for simplicity, that there is a only one type of rail ticket, and that there is direct on-track competition between two different train operators offering services between towns A and B. This competition has led to both train operators setting a price of £30 return on the route (that is, the competitive price is £30). Further, suppose that there is a coach service in operation between A and B with return prices at £15 and a budget airline in operation between airports close to A and B charging £45 return.
- 2.33 If a merger between the two train operators were contemplated, it would be appropriate to consider whether the relevant market for the analysis of that merger was that for train services between A and B or whether it was a broader market that included airlines and coaches too. In assessing the likely impact of the merger on competition, one would be interested in the degree to which a price increase by one train company led to higher sales by the other train company and to what extent those price increases might lead to higher sales by the coach and airline companies. If the evidence suggested that when one train company raised its price most lost sales went to the other train company, with very few sales going to the coach company or the airline, then it might well be appropriate to define the market as that for train travel between A and B. On that basis, the merger would create a monopoly of the train market and coach or air travel would not form part of the relevant market since neither provides an effective competitive constraint on the pricing behaviour of train travel such that

a hypothetical monopoly supplier of train services between A and B could profitably increase prices by 5-10 per cent above prevailing prices.

- 2.34 But now consider an alternative scenario in which instead of two competing train companies operating services between A and B, there is a single supplier. Moreover, assume that the single supplier of train services charges £35 return (the prevailing price). In other words, the loss of competition between the providers of train services has resulted in a 17 per cent increase in prices above the competitive level. By construction, a single supplier of train services enjoys a dominant position in the sense that it is a firm that is no longer constrained to price at the competitive level, but is free profitably to set a significantly higher price than the competitive level.¹⁷
- 2.35 Suppose that the single provider of train services were subject to a Chapter II investigation into an alleged abuse of a dominant position. One can again attempt to use market definition as a tool to aid in the analysis. So, with the single train company charging £35 return, one can now ask whether a, say, 5 per cent (£1.75) price rise would be profitable for all train services. In other words, what are the consequences of raising train prices from £35 to £36.75? In this situation the train company may well be able to show that if prices were raised in this way significant numbers of customers would switch to coach travel and significant numbers would switch to the airline. This would appear to justify a broad market definition of train, coach and airline travel between A and B.
- 2.36 If, on the basis of passenger miles, the train would have 35 per cent, the airline 35 per cent and the coach 30 per cent, one would be tempted to conclude that, with just 35 per cent, the train company did not have a dominant position in the market. However, we know (by construction of the example), that the train company does have a dominant position in the narrower market for train travel because we know that the competitive price is £30 and it is already charging £35 - significantly more than the competitive price level. Coaches and airlines are only substitutes in this situation because the rail monopoly is already being fully exploited.

Conclusions

- 2.37 The key implication of the 'cellophane fallacy' is that the identification of substitutes at existing prices does not necessarily identify the set of products that are substitutes at the competitive price which is the relevant benchmark for assessing dominance cases. Evidence that shows a firm to have numerous

¹⁷ Where the competitive level is defined as the level that prevailed when there was on-track competition.

substitutes at current prices cannot therefore be used to come to a definitive conclusion as to whether or not a firm already enjoys a dominant position in a narrower market. All it can be used to do is to identify those competitors who act to prevent prices moving above their current level.

- 2.38 As a result of the 'cellophane fallacy' the application of the standard market definition test to identify substitution at current prices will tend systematically to define overly broad markets for the purpose of assessing investigations under Article 82 or Chapter II of the Act and so underestimates a firm's market share and possibly in consequence its degree of market power.

3 MARKET DEFINITION AND DOMINANCE

3.1 This section considers the role of market definition within the assessment of dominance in the light of the problems raised by the cellophane fallacy. It first sets out the traditionally accepted role of market definition within the two-step process used to identify abuse of a dominant position. It then briefly reviews the practical role that market definition plays in dominance and monopoly cases. The section then considers whether an alternative to the SSNIP-based approach to market definition is warranted in non-merger cases. We conclude that the SSNIP-based approach continues to have value in the broader assessment of dominance and in this light the section goes on to discuss in some detail how the existing framework and existing empirical techniques can contribute to a reasoned process of the assessment of dominance.

The role of market definition in assessing dominance

3.2 The Competition Act 1998 prohibits conduct that amounts to abusive behaviour by a dominant undertaking. As the guidelines on the Chapter II prohibition state, this is a two-stage process.¹⁸ Specifically, one must:

- first determine whether the undertaking under investigation is dominant in a relevant market; and
- second, if the undertaking is found to have a dominant position, determine whether its conduct amounts to an abuse.

3.3 As noted in Chapter 2, the definition of the relevant market permits the use of market shares when assessing dominance. In addition, it provides the framework for assessing those other elements that are also important, for example assessing whether entry barriers are significant. This overall analysis of the market structure and the nature of competition within it can then inform a view as to whether the party under investigation is dominant and therefore whether it is necessary to proceed to the second leg of the assessment: namely, the analysis of abuse.

Modifying the SSNIP test in light of the cellophane fallacy?

3.4 In monopoly and dominance cases the key issue is whether rival products provide a competitive constraint on the products under investigation at

¹⁸ See Office of Fair Trading guidelines, section 3.1 The Chapter II Prohibition, 1999.

competitive prices. What is relevant for the inquiry is whether a single supplier of the products under investigation would be able to increase prices profitably above the competitive level and sustain them at that level. As the above example illustrates, this raises severe practical difficulties.

In principle, the hypothetical monopolist test can be easily modified to take this into account. Instead of asking whether a single firm could profitably increase prices above *prevailing levels* one would ask whether the hypothetical monopolist could profitably increase prices above the *competitive level*.

- 3.5 This is the approach advocated in the EC Commission Notice on market definition. The Notice states:

'Generally, and in particular for the analysis of merger cases, the price to take into account will be the prevailing market price. This may not be the case where the prevailing price has been determined in the absence of sufficient competition. In particular for the investigation of abuses of dominant positions, the fact that the prevailing price might already have been substantially increased will be taken into account'.

- 3.6 It is also recognised in the OFT guidelines that state:

'[Under the Chapter II prohibition]...The Director General must make some judgement on whether or not the current price is likely to be significantly above competitive levels already'¹⁹

- 3.7 Unfortunately, whilst these statements acknowledge the problem, they provide little guidance as to how it is to be addressed in practice. If one could identify the competitive price level then there would be no need to go through the whole process of defining relevant markets. In monopoly cases, the issue is whether prices are already too high. If one could identify the competitive price level then all Article 82 and Chapter II investigations would be trivial. One would simply identify the competitive price level and then compare it with the observed price level. If the observed price level were significantly above the competitive price level then the firm can be deemed to hold a dominant position (i.e. the ability to charge prices significantly in excess of the competitive level). There would be no need even to consider the definition of the relevant market, other than to satisfy strict legal requirements to do so.

- 3.8 But in practice it is extremely difficult and in most cases impossible to determine the competitive price level. This difficulty has profound implications for the application of the SSNIP test to the assessment of dominance. In particular, the

¹⁹ OFT 403, para 5.13.

inability to define the competitive price level means that empirical evidence designed to assess the degree of substitution between products at existing prices is much less useful in defining relevant markets in dominance cases since we do not know whether, for example, co-movement of prices indicates possible substitution at *competitive prices* or merely substitution at *monopoly prices*.²⁰ This is not to say that observable industry behaviour and data can provide no useful evidence in discriminating between competing market definition claims, but that great care needs to be exercised to ensure that what is identified is not merely substitution at monopoly prices.

Alternatives to the SSNIP test?

3.9 Although several competition authorities have now adopted the SSNIP test or an almost identical variant of it, it is sometimes asked whether there is any alternative methodology that could be used to define markets. Indeed, the current OFT guidelines on market definition state that the SSNIP test is one way of looking at market definition, implying that there may be others.²¹ DG Comp in the course of investigations under Article 82 has made a similar statement, namely, that the market definition test set out in the EC Notice is one of the possible tests of market definition, but not necessarily the only test. For example in *Virgin/British Airways*, the Commission states:

'The Commission has provided detailed guidance on how it applies this principle in practice in its Notice on market definition. The Notice describes how the Commission uses information about product characteristics, evidence of past substitution and so forth to define a product market. The Notice mentions the idea of a hypothetical price rise but does so to explain the concept of a relevant market'.²²

3.10 We cannot agree with this view.²³ Indeed, it is only possible to describe how one uses information if there exists a framework in which to make the assessment. As discussed above, the hypothetical monopolist test seeks to identify the main competitive constraints and does so with reference to demand-side and supply-side substitutes. If market definition is to have any useful role to play in competition law it must be capable of capturing, as best as is possible in the circumstances, the nature of the competitive constraints that act on the

²⁰ Monopoly price here is used to refer to prices at which firms earn supra-competitive profits.

²¹ See OFT 403, Market Definition, Office of Fair Trading, March 1999, paragraph 2.8.

²² *Virgin/British Airways*, Case IV/D-2/34.780, paragraph 70.

²³ If the Commission's view were correct, then its Notice on market definition is largely redundant and cannot fulfil its stated claim of improving transparency into the process of market definition.

firms within the market. Since competitive constraints can only originate from the behaviour of customers (e.g. demand-side considerations) or the behaviour of other firms (e.g. supply-side considerations) demand-side substitution and supply-side substitution must lie at the heart of any analytically useful market definition test and it is therefore hard to see how any alternative approach could be consistent with the basic requirement to assess competition between products and regions.

- 3.11 Indeed, neither the OFT guidelines nor any EC communication has described what the alternative to the SSNIP test might be. Any statement to the effect that SSNIP is just one example of how to define a relevant market without clearly specifying what the alternative to SSNIP might be, clearly runs the risk of a return to a process of market definition by *ad hoc* reference to product characteristics. Of course, the SSNIP test does not fully resolve all of the competitive issues raised in a case and may not even fully capture all relevant aspects of demand and supply-side substitution, notably in cases where products are differentiated. Nonetheless, demand and supply side substitution – concepts at the heart of the SSNIP test – will always be key and the SSNIP test provides a useful framework on which to build the remainder of the competitive analysis. In short we do not believe that an alternative sensible methodology to the SSNIP test exists.
- 3.12 An alternative suggestion that has been advocated is to abandon market definition altogether. Some commentators, often academics, argue that the definition of the relevant market represents an artificial step in the analysis and that one would be better off proceeding directly to the analysis. We disagree with that proposition, believing that advocates of this approach misunderstand the role that market definition plays in the practical assessment of competition cases.
- 3.13 In our view, the omission of market definition altogether from the process may be harmful because:
- it leaves all subsequent analysis without any rigorous framework, leaving too much of the analysis resting on subjective judgement, particularly if the other elements of the dominance analysis and of the analysis of abuse have not been more rigorously addressed to compensate for the loss of market definition as a tool of the analysis; and
 - the analysis cannot benefit from the genuine insights that can be obtained from an honest attempt at market definition, even in full knowledge of its limitations in Chapter II cases.

- 3.14 Even within Chapter II cases, we believe that the exercise of thinking about how the relevant market should be defined provides a focus and scope to the more detailed competitive analysis of the activities of the allegedly dominant firm. In the absence of an explicit market definition stage, subsequent analysis might be undertaken in an arbitrary manner. Without any coherent framework in which to conduct the analysis, there is a real danger that the analysis could degenerate to the level of 'I know abuse when I see it' in which there are no identifiable benchmarks against which to discriminate between 'competitive behaviour' and 'anticompetitive behaviour'.

A practical role for market definition in dominance investigations

POTENTIAL RESPONSES TO THE CELLOPHANE FALLACY

- 3.15 The existence of the cellophane fallacy therefore has profound implications for the way in which market definition is undertaken and the manner in which the results of that exercise should be interpreted in the context of an analysis of dominance. Since the cellophane fallacy implies that the identification of substitutes at existing prices does not necessarily identify the set of products that would be substitutes at the competitive price, empirical data that shows a firm to have numerous substitutes at *current* prices cannot provide a definitive evidence that a firm does not already enjoy a dominant position.
- 3.16 The cellophane fallacy would therefore appear to represent a fatal blow to any market definition methodology based on the identification of substitutes, since any such methodology will face the same problem. In response to the difficulties introduced by the cellophane fallacy, it might be tempting to:
- continue with market definition on the basis of current substitutes, ignoring the cellophane fallacy;
 - define relevant markets using an alternative analytical framework to that embodied in the SSNIP test; or
 - abandon market definition altogether as a step in the substantive analysis, arguing that it is an impossible and meaningless exercise in the context of dominance investigations, and its role can be confined to the *ex post* justification of a finding of dominance and to satisfying the necessary legal requirements.
- 3.17 In our view, each of these approaches is flawed. The first will result in the relevant market being defined too widely and therefore will result in the systematic understatement of market power. In consequence, competition policy would be overly permissive with respect to dominant firm behaviour.

- 3.18 The second approach, as discussed above, is also flawed. Where relevant markets are not defined with reference to the competitive constraints that exist between products, the resulting market shares will generally provide poor proxies for the level of market power that a firm possesses and therefore do not provide an appropriate basis for concluding dominance.²⁴
- 3.19 The third approach - omission of market definition altogether - is preferable to both of the other responses. It does not introduce any particular bias into the enforcement of competition law, but opens up the possibility that the subsequent analysis will be conducted in an *ad hoc* and imprecise exercise.
- 3.20 We therefore do not believe that any of the three alternative approaches represents a sensible policy reaction to the cellophane fallacy. Moreover, we believe that a number of steps can be taken to make the market definition exercise as rigorous and robust as possible. In addition, in recognition of the possible continuing weakness of the market definition to which the cellophane fallacy gives rise, we believe that a number of steps can be taken to complement market definition in the assessment of dominance.²⁵
- 3.21 The remainder of this section specifically considers how the market definition stage of the dominance analysis might be conducted in the light of the cellophane fallacy to make the market definition element of that overall analysis as robust and useful as possible.

A LEGITIMATE ROLE FOR MARKET DEFINITION IN DOMINANCE CASES

- 3.22 Despite the existence of the cellophane fallacy, we continue to believe that market definition in general and the hypothetical monopolist test in particular have value. Market definition in dominance and monopoly inquiries can perform a number of important roles. These are to ensure that the following hold:
- all hypothesised market definitions are at least consistent with the principles of demand and supply-side substitution that underpin the SSNIP test;
 - all products claimed to be part of the same market as the products of the firm under investigation are at least substitutable at current prices;

²⁴ Of course, market shares by themselves should not be taken as conclusive evidence of dominance even where the relevant market is correctly defined.

²⁵ We also believe that much more emphasis needs to be placed on the assessment of abuse rather than using a finding of dominance to warrant necessarily the conclusion that conduct is abusive because, say, it corresponds to one of the practices cited as an indicative abuse in a legal checklist.

- any assessment of the characteristics of the products is rigorously undertaken and that only the most relevant characteristics are considered; and
- whenever possible empirical evidence that is not tainted by the cellophane fallacy is used to shed light on the relevant market definition.

Each of these possible elements of the market definition exercise are explored in more detail below.

CONSISTENCY WITH BASIC PRINCIPLES

- 3.23 The first step in the definition of the relevant market in dominance investigations is to ensure that the market definitions that have been advanced or that are actively under consideration are consistent with the basic principles of market definition. In other words, one ought to ask whether the inclusion of the products in the hypothesised markets is consistent with the idea that all products within a market are either demand-side or supply-side substitutes with other products in that market. This may seem an obvious step to take, but it is one that in some cases will lead to the rejection of markets that have been defined on an *ad hoc* basis solely for the purposes of contriving a particularly high or low market share for the firm under investigation.
- 3.24 Consider the following hypothetical example. Suppose that a manufacturer, Allfoods Ltd (Allfoods), supplies a wide range of food products to retailers. It faces competition from other manufacturers but these competing manufacturers tend to focus on only a few product categories. So whereas Allfoods serves fifty product categories, the other companies variously supply between one and ten product categories.
- 3.25 Allfoods imposes certain restrictions on retailers that have attracted the interest of the competition authority. The first issue to address is the relevant market definition to adopt in analysing the case. Complainants, foremost Allfoods' major competitors, have argued that the relevant market should include all product categories, a definition that would give Allfoods a market share of about 40 per cent by retailer turnover. Under this definition it would be the clear market leader and its closest competitors would have market shares of no more than around 10 per cent. However, at the level of the individual product categories Allfoods faces at least one competitor with a market share similar to or greater than its own.
- 3.26 Clearly the way in which the relevant market is defined will crucially determine the outcome of the dominance element of the investigation. If the relevant

market is defined as 'the purchase of food retail services', as the complainants would like, then Allfoods will have a market share of around 40 per cent. With no other competitor enjoying a share of more than 10 per cent, this may well lead to it being found to be dominant. However, if one is genuinely interested in identifying the competitive constraints to which Allfoods is subject then the relevant markets should be defined by considering the competitive interactions existing between the different manufacturers in each of the food product categories. Only if this approach is followed can market shares provide any legitimate indication of the level of market power enjoyed by Allfoods. In contrast, market shares calculated on the basis that the relevant market is 'the purchase of retailer services' do not, and cannot, provide a satisfactory indicator of market power and therefore could not legitimately be used as a basis for inferring dominance.

3.27 A recent US case is illustrative of the use of market definition principles, as opposed to empirical evidence of the degree of substitutability, to discriminate between alternative market definition hypotheses. In *Queen City Pizza Inc. v Domino's Pizza Inc.*, the complainants (Queen City Pizza) were franchisees of Domino's Pizza. The complainants argued that Domino's had monopolised (i.e. were dominant in) the supply of ingredients to Domino's Pizza franchisees. All parties agreed that Domino's accounted for approximately 90 per cent of all ingredients supplied to its own franchisees. This situation arose from the terms of the standard Domino's franchise agreement that required franchisees to buy all ingredients from Domino's or suppliers authorised by Domino's.

3.28 The US court of appeal upheld an earlier district court decision dismissing Queen City Pizza's case against Domino's on the grounds that the plaintiff had failed to define a relevant market in accordance with the rule of reasonable interchangeability and cross-elasticity of supply (i.e. substitutability). Specifically, it noted that:

'Where the plaintiff fails to define its proposed relevant market with reference to the rule of reasonable interchangeability and cross-elasticity of demand, or alleges a proposed relevant market that clearly does not encompass all interchangeable products even when all factual inferences are granted in the plaintiffs favour, the relevant market is legally insufficient and a motion to dismiss may be granted' (emphasis added).

3.29 In this particular case, the court held that the plaintiffs were unable to substitute to the purchase of other products solely because of contractual terms contained in the franchise agreement to which they were party. The lack of substitutability of alternative products did not extend to non-franchisees (i.e. only those subject to the agreement were obliged to buy from Domino's) and it did not result from

any technical or physical difference in the products supplied by Domino's. The court went on to argue that:

'...the Domino's franchisees could assess the potential costs and economic risks at the time they signed the franchise agreement. The franchise transaction between Domino's Pizza and plaintiffs was subjected to competition at the pre-contracting stage.'

- 3.30 In other words, the court was of the view that the relevant market was that in which Domino's and the plaintiffs were active prior to the signing of the franchisee agreements.
- 3.31 In addition, there have been numerous other US monopolisation cases where the case has been dismissed because of a failure to specify a relevant market in terms of 'reasonable interchangeability'.²⁶ In particular, in *E. & G. Gabriel v Gabriel Bros., Inc.*, the case was dismissed for failure to plead a valid relevant market when the proposed relevant market contained items with no cross-elasticity of demand (i.e. were not substitutes), as would be the case in the Allfoods example set out above.²⁷

ASSESSMENT OF THE EXTENT OF SUBSTITUTION AT CURRENT PRICES

- 3.32 A second important step that can be undertaken in market definition in dominance cases is to assess whether products that are claimed to be in the relevant market are substitutes at current prices. Although evidence that two products are substitutes at current prices does not *prove* that they are in the same relevant market, failure to show that two products are substitutes at current prices does prove that they are *not* in the same market for the purposes of assessing dominance. At a minimum, therefore, any firm seeking to claim that it faces effective competition from a rival product must be able to show that the product concerned is a substitute at existing prices.
- 3.33 Consider the following example, in which allegedly dominant firm A claims that it competes in the same relevant market as firm B and firm C since these firms are effective competitors that constrain its prices to a broadly competitive level. This claim has two elements:
- firms B and C are competitors at existing prices; and

²⁶ For example, see *Tower Air, Inc. v Federal Exp. Corp.*, 956 F. Supp. 270 (E.D.N.Y. 1996).

²⁷ *E. G. Gabriel v. Gabriel Bros., Inc.*, 1994, U.S. Dist. LEXIS 9455, No. 93 Civ. 0894, 1994 WL 369147 (S.D.N.Y. 1994).

- existing prices are competitive.

The second element - whether current prices are competitive – can not be satisfactorily resolved. As discussed in Chapter 2, if the competitive price could be identified then the whole assessment of abuse would be a trivial matter. No further discussion on this issue is therefore necessary.

- 3.34 However, if firm A's claim is true it should be possible to show that B and C are competitors at current prices. This can be done using all the empirical techniques that are routinely employed in merger analysis. Thus, if B and C are competitors at current prices, it *might* be the case that they form part of the same relevant market as A for the purposes of assessing dominance.²⁸ Owing to the cellophane fallacy we cannot know whether this is the case since we do not know whether current prices are actually the competitive prices or above the competitive prices. But, at a minimum, if B and C are not competitors at current prices then they are clearly not in the same relevant market as A.

ANALYSIS OF RELEVANT PRODUCT CHARACTERISTICS

- 3.35 Since evidence of substitution at current prices is tainted by the 'cellophane fallacy' market-based evidence of substitution at prevailing prices is of limited value in market definition in Chapter II cases. The market definition process is therefore likely to rest heavily on the subjective analysis of the characteristics of the products involved. Given that reliance, there is a great danger that markets are simply defined on the basis of physical differences in the products concerned or on the basis of the casual introspection of the analyst. However, as reference to the basic principles underlying the hypothetical monopolist test shows, it is not differences in the physical characteristics of the products that legitimises their exclusion from the relevant market, but the effect those differences in characteristics mean for the substitutability of the products. For example, a naïve product characteristics approach could easily lead to the assertion that red widgets and blue widgets are in different markets since they have different physical characteristics – in this case colour. But unless colour is thought to be an important determinant of consumers' demand for the products so that red widgets do not constrain the price of blue widgets and *vice versa*, the grounds for distinguishing between them in this way are weak.
- 3.36 Recognition that it is not differences in physical characteristics that are important, but that it is the manner in which these differences may influence demand for the products, opens the way for an informed investigation of the legitimacy of distinctions made on the basis of physical characteristics.

²⁸ In a merger context, this evidence would be sufficient.

Specifically, if it is claimed that two products should be in different markets because of specific differences in some aspect of their physical character, such as colour, the importance of colour to actual and prospective purchasers of the products should be assessed and where possible tested. For example, customers could be asked to rank the attributes of the two products or give weights to the importance of each attribute. This may reveal whether the physical differences in product characteristics are likely to be material in determining whether the two products are demand-side substitutes at any feasible set of relative prices.

Case Study: United Brands

In the United Brands case, one important question was whether the relevant product market was that for bananas or that for fresh fruit more generally. The ECJ defined the product market extremely narrowly, as the market for bananas alone, based largely on the existence of a set of captive customers who allegedly greatly valued a particular physical characteristic of bananas. Specifically, the ECJ deemed bananas to be a distinct product market on the grounds that certain consumers, such as the very elderly or the very young, could not substitute away from bananas to harder fruits, valuing the softness of bananas. In its judgment it noted that:

'...the Commission maintains that there is a demand for bananas which is distinct from the demand for other fresh fruit especially as the banana is a very important part of the diet of certain sections of the Community'

'...the banana has certain characteristics, appearance, taste, softness, seedlessness, easy handling, a constant level of production which enable it to satisfy the constant needs of an important section of the population consisting of the very young, the old and the sick.'

The reasoning of the Court is flawed. When assessing demand-side substitution it is not necessary for all consumers to switch away from bananas for the wider market to be relevant. It would have been sufficient for the parties to show that a sufficient number of consumers would consider other fruits substitutes to render the hypothetical price increase unprofitable. However, in United Brands the Court appears to have required virtually complete substitutability, ignoring the existence of many marginal customers who could have switched away from bananas and whose existence could very well have constrained pricing to competitive levels.

Moreover, the claim that the different characteristics of the product render it unique for the group identified is amenable to at least some empirical scrutiny. For example, one might have considered the possibility that softness and

'seedlessness' might not be particularly important factors driving the purchase decisions of consumers, and in particular of those made by the elderly.

3.37 There is therefore an important distinction between the following two uses of product characteristics to infer the extent of the relevant market.

3.38 The first approach can be summarised as follows:

'These two products do not form part of the same relevant market because they have different physical characteristics'.

3.39 But that approach is not conducted within the framework of the hypothetical monopolist test. That test could conclude that two products do not form part of the same relevant market on the following grounds.

'These two products do not form part of the same relevant market owing to differences in their physical characteristics that imply that there is little scope for demand or supply-side substitution between them'.

3.40 By focusing the inquiry on the possibilities of substitutability, the latter approach provides a framework in which all the available sources of information about the determinants of demand, including customer surveys, marketing studies and business plans are put into their proper context. This helps prevent the market definition exercise degenerating into the construction of a list of adjectives by which ever-narrower markets are defined.

ASSESSMENT OF UNTAINTED EMPIRICAL ANALYSIS

3.41 Even if relevant markets are defined with reference to the appropriate principles contained in the SSNIP test, it is possible and indeed likely in many cases that there may be more than one plausible market definition. In such cases, it will often not be possible to progress the market definition analysis further by using observed market evidence to discriminate between competing claims. The subsequent analysis must therefore progress in the knowledge that the issue of market definition has not been adequately resolved.

3.42 However, in some cases, it may be possible to discriminate between definitions using other empirical evidence that is not tainted by the cellophane fallacy. Price concentration studies are one possibility. For example, suppose that a fast food hamburger chain owned all three hamburger shops in a small town in which there were also two fish and chip shops and a kebab shop. Suppose it has been

alleged that the relevant market is hamburger shops and that the chain has a monopoly that it is abusing, by tying purchases of chips (sold in the fish and chip shop and in the kebab shop) to purchases of burgers. As a result it was now subject to a Chapter II investigation.

3.43 Any evidence based on an analysis solely of the prices and substitution possibilities within the town itself is potentially distorted by cellophane fallacy problems. The burger chain will have raised prices to the point at which fish and chips, or kebabs, had become the relevant constraint on further price increases. However, by using information across several different geographic markets it may be possible to discriminate between the “burger market” definition and the 'fast food' definition.

3.44 For example, one could look at prices for burgers in ten towns including the town in which the investigation is taking place and then compare price levels against the degree of concentration in the town under each market definition.

TABLE 3.1 - RESULTS OF PRICE-CONCENTRATION STUDY

Town	Burger Price	Owned Burger Bars	Rival Burger Bars	Fish & Chips	Kebabs
Target Town	1.89	3	0	2	1
A	2.19	2	2	0	0
B	2.09	1	0	1	1
C	2.09	2	1	1	1
D	1.99	2	0	0	3
E	1.99	1	2	0	1
F	1.89	3	1	1	2
G	1.79	2	2	2	0
H	1.79	2	0	1	1
I	1.79	3	1	3	1

3.45 The hypothetical data in Table 3.1 shows that there is no systematic relationship between the price charged for a burger by the chain allegedly dominant in Target Town and the extent of burger competition in other towns. In fact, a simple comparison shows that the average price that is charged by the chain in towns where it faces no direct burger competition is £1.94. In towns where it does face competition from rival burger chains its average price is £1.96. The absence of any material difference in the average prices charged for burgers as

between towns with burger competition and those without is at least indicative that 'burger shops' is unlikely to define a relevant market and that it is likely to be reasonable to include the fish and chip shops and kebab bars in the relevant market definition.

- 3.46 In effect, price-concentration studies may help get round the cellophane fallacy by looking for comparable markets that on the basis of their structure are more 'competitive' on the basis of some market definitions than others and then by considering whether their more 'competitive' structure has led to lower prices. If it has not done so then that calls into question the validity of the market definition or at least the validity of any inferences that one can draw from looking at the market structure. Of course, in practice, such studies are often complex and it is important to check, for example, that demand and cost conditions are constant across comparator areas before conclusions about the evidential value of relative prices and for market definition are drawn.

Conclusions

- 3.47 The cellophane fallacy raises some serious issues for practical definition of defining the relevant market in the context of dominance investigations. But despite those difficulties it raises, the cellophane fallacy does not imply that a new theoretical framework to defining relevant markets is required. On the contrary, the framework embodied in the SSNIP test, with its focus on competitive constraints, continues to provide the correct theoretical framework. Where the cellophane fallacy impinges is on the practical implementation and the use of observed market evidence, and, in particular, price data.
- 3.48 Ignoring or denying the existence of the cellophane fallacy would represent a serious mistake. If this approach were to be followed, it would lead to the definition of overly broad markets within which firms possessing significant market power would have only modest shares. The current practice of relating a firm's market power to a firm's market share would thus lead to the systematic understatement of market power. Alternatively, in seeking unconsciously to compensate for the existence of the cellophane fallacy, one might tend to adopt overly narrow market definitions on the basis of a 'gut feeling'. Such an approach would give rise to the systematic overstatement of market power.
- 3.49 Moreover, this section has argued that market definition still has an important role to play in the assessment of dominance. While one might be tempted to despair of satisfactorily resolving the cellophane fallacy and advocate abandoning market definition altogether, that approach would be inconsistent with previous decisions of the courts that have stated that a market must be

defined before a dominance finding can be made. Moreover, the definition of the relevant market would still need consideration at some stage in the analysis since as soon as statements are made in the analysis about the competitors to the allegedly dominant firm or about the nature of the barriers to entry that protect it, some view is implicitly being taken of the relevant market. For example, in what activities are its competitors in competition with it? If there are barriers to entry, in to what activity do potential entrants face these barriers? One cannot avoid market definition in some form. Furthermore, the requirement to assess demand-side and supply-side competitive constraints that market definition provides a useful back-stop to guard against *ad hoc* competitive assessments and ultimately of the 'I know abuse when I see it' mode of analysis.

4 MARKET DEFINITION AND THE ASSESSMENT OF ABUSE

The cellophane fallacy and its implications for assessing abuse

- 4.1 As noted above, the assessment of abuse tends in practice to rest on a finding of dominance. Investigations under Article 82 often focus on the establishment of dominance (something which we hope the reader will at this stage not take for granted), and inferring abuse with reference to the case law. This process of assessing abuse effectively amounts to one of *per se* prohibitions on certain business practices when undertaken by dominant firms and is ultimately unsatisfactory.
- 4.2 Even if market definition could always be resolved, a detailed analysis of abuse would still be required. But given the existence of the cellophane fallacy and its implications for the robustness of market definition, such an approach is fraught with problems. Although market definition continues to have an important role to play in Article 82/Chapter II investigations, the cellophane fallacy implies that in many cases competing market definitions cannot normally be tested against market data. This weakness and its consequences need to be recognised. Given the possibility of two or more plausible competing market definitions that cannot be resolved satisfactorily by reference to facts, the analysis of dominance must necessarily go substantially beyond a mere review of market shares. Moreover, given the likely weakness of the market definition finding and possibly also therefore the weakness of the dominance finding itself, it becomes especially important that the analysis of the effects of the abuse is properly undertaken.
- 4.3 In consequence, we strongly advocate greater emphasis being placed on the assessment of the economic effects of abuse than has traditionally been the case.²⁹ Market definition continues to play an important role but this role is more akin to one of 'filtering' potentially problematic cases from those that clearly do not raise competition issues. In this sense, the role we foresee for the definition of the relevant market in the assessment of dominance and ultimately of abuse is akin to the role it plays in the application of the EC Commission's Vertical Restraints Block Exemption.
- 4.4 The remainder of this section provides a more detailed description of how this process might work in practice.

²⁹ We recognise that this is not a straightforward task and in some sense introduces additional complexities.

Analysing dominance

4.5 In analysing dominance there are several steps that should always be gone through. In our view these are as follows.

- Acknowledge that a definition of the relevant market is implicit in most competitive assessments given the need to identify competitors and the nature of barriers to entry. This being the case, an explicit view as to the likely definition or definitions of the relevant market are to be preferred to implicit definitions.
- Undertake the best market definition exercise possible, subject to the constraints frequently imposed by the cellophane fallacy on the ability to validate different market definitions by reference to observed market data, by taking into account:
 - ◆ the *a priori* consistency of any hypothesised market definition with the basic framework of market definition, based on the concepts of demand and supply-side substitution;
 - ◆ the elimination of overly broad market definitions by establishing that products or regions are not substitutes at prevailing prices;
 - ◆ the physical characteristics and uses of the different products, validating claims about the relevance of different physical characteristics by reference to survey data or other marketing information;
 - ◆ the use of any empirical evidence that may exist to aid in the discrimination between different market definitions where such evidence is not tainted by the cellophane fallacy.
- Recognise that more than one plausible market definition may exist and that it may not be possible to discriminate between the two.
- Use the various plausible market definitions to perform a preliminary screen of allegations of dominance. Where the market share of the undertaking under investigation is low (relative to the dominance threshold) in all plausible market definitions, then it can be concluded that dominance is unlikely and no further investigations are required. However, where the undertaking does have a high market share (relative to the dominance thresholds) in one or all of the plausible market definitions then the possibility of dominance cannot be dismissed and further analysis is required.

- 4.6 However, the assessment of dominance does not end with the definition of a relevant market and calculation of market shares.³⁰ This is always true, even in merger cases, but is particularly so in dominance cases where one cannot readily validate market definitions against market data.
- 4.7 One must also take into account a number of other factors in assessing dominance. For example, despite a high share of the market under any plausible market definition, a firm may not be dominant where one or more of the following hold.
- There are very low barriers to entry into the relevant market and the threat of potential entry is sufficient to discipline firms with high market shares.
 - The nature of competition within the market is such that very intense competition exists even where there are very few players. For example, in markets characterised by large and infrequent bids it may be possible for effective competition to exist between just two firms.³¹
 - The nature of the buyers in a market and the volumes that they purchase are such that they can exert significant countervailing power against a firm with a high market share. They may be able to do this by threatening to promote competitors' products (particularly in a retail context), switch strategic volumes of business to deny the supplier economies of scale (particularly where suppliers need to maintain high levels of capacity utilisation) or engender new entry by underwriting entry costs with long term contracts.
- 4.8 Moreover there may be occasions on which it is possible to consider dominance in a more direct manner, most obviously through the analysis of the profitability of the firm under investigation. For example, the Monopolies and Mergers Commission (MMC) felt able to conclude in a number of cases, such as *Classified Directory Advertising Services*, *Salt* and *Condoms* that profits were excessive and hence that prices were above those that might have been expected to prevail in a competitive market. It should be noted that these conclusions were based on the direct analysis of profitability rather than upon any attempt to explicitly model the 'competitive' price in the abstract. In such cases it may be possible to conclude from the analysis of profits that prices are significantly above the competitive level and that a dominant position is held. It

³⁰ The Department of Justice and Federal Trade Commission 1992 Merger Guidelines devote only 14 pages of 58 pages to the definition of the relevant market - the remainder are devoted to the calculation of market shares and the assessment of competition in that market.

³¹ For a discussion of the circumstances in which effective competition may be created with just two firms, see 'When Two is Enough: Competition in Bidding Markets.' Bishop and Bishop, *European Competition Law Review*, Vol.17, no.1.

may then be possible to make an inference about the relevant product market definition from that finding.

- 4.9 However, whilst the market definitions that may be inferred from direct evidence of excessive profitability and excessive prices may be of value in the course of the inquiry, that value is not in sustaining the finding of dominance. In the situation described above, market definition is being inferred from direct evidence on dominance. It is therefore circular to use market shares calculated using the inferred market definition to sustain a finding of dominance. Dominance has been directly established without the need to go through the intermediate step of market definition and market share calculation.
- 4.10 However, there is nonetheless value in making inferences about market definition from direct evidence on dominance. First, it is a legal requirement to define a market if an abuse of dominance case is to be successfully prosecuted. Second, and more importantly, from the point of view of the conduct of the analysis, the market definition that can be inferred from the direct evidence on dominance may be vital in the analysis of abuse. As we will argue later in this paper, the focus of the substantive analysis in abuse of dominance cases should be on the analysis of the abuse. In analysing abuse it will be important that some view is taken of the market into which entry is allegedly prevented or from which smaller competitors are claimed to be excluded by the allegedly abusive behaviour. One cannot talk sensibly about the raising of entry barriers or the exclusion of rivals without having some notion of what it is that they are being excluded from.

Undue emphasis on dominance

- 4.11 The analysis of market definition and the resultant market shares can therefore provide a valuable screen for eliminating from consideration those cases where, on the basis of any plausible definition, the structure suggests that dominance is not likely. In addition, there are other factors, such as the assessment of entry barriers, the nature of the competitive process in a market, buyer power and profitability that can act to further refine the conclusions on dominance.
- 4.12 Given the existence of the cellophane fallacy and the inherent uncertainty that this introduces into the process of the identification of dominance, one should always be conscious of the potential weakness of the dominance analysis. This means that the analysis of the alleged abuse ought to assume greater significance than has hitherto been the case in EC competition law.
- 4.13 Chapter II, in common with Article 82, does not prohibit undertakings from holding a dominant position but only the abuse of that position. This suggests that the primary focus of the competitive assessment under Article 82 should be

to assess whether the business conduct constitutes an abuse. However, experience of the application of Article 82 shows that this is not the case and the main focus of such inquiries tends to be on the issue of dominance. This approach is inappropriate for a number of reasons.

4.14 First, even if market definition could be done robustly, placing too much emphasis on the issue of dominance to infer abuse would still be subject to criticism. However, as noted above, defining the relevant market in dominance cases is often problematic and unresolvable in a satisfactory manner. Given these difficulties and the consequent issues when using market shares to infer dominance, it is surprising that market shares play such a significant role in the assessment of Article 82 inquiries. Market shares, rather than being the central element of such investigations, should be used as a screening mechanism for focusing competition agencies on those cases mostly likely to involve anti-competitive abuse.

4.15 Second, the current focus on dominance encourages lazy thinking. There is often a sense in which Article 82 inquiries appear to have been conducted in a backwards fashion. This approach can be caricatured as:

- identify a business practice to which objections have been made (usually by competitors rather than customers);
- compare the allegedly abusive behaviour to a 'checklist' of behaviour which has, in the past, been found to be abusive by the Courts and, if similar, infer that it is anti-competitive (or, alternatively, find the business practice objectionable based on priori beliefs about the workings of the market in question);
- define a relevant market in such a way that the undertaking concerned has a high market share;
- conclude that because the undertaking has a high market share it enjoys a dominant position; and
- infer from its dominant position that its behaviour is an abuse.

4.16 This approach is clearly unsatisfactory because it completely pre-judges both the assessment of dominance and the effects of the abuse. It leads to market definitions which are not based on a consideration of the competitive constraints that exist between products and regions and to a cursory analysis of the effects of the abuse. At worst this results in the 'I know abuse when I see it' mode of competition law enforcement whereby the authorities enjoy total discretion over the policing of firms and their conduct.

- 4.17 We believe that requiring all relevant market definitions to be at least consistent with the principles of demand and supply-side substitution, in addition to the other steps outlined previously, would help to reduce the scope for this mode of analysis.
- 4.18 Third, the emphasis on dominance effectively treats certain categories of business conduct as *per se* abusive. The Competition Act, mirroring EC competition law, provides broad categories of business behaviour within which particular examples of abusive conduct can be found.³² Although it is recognised that the distinction between conduct that is permissible and conduct that is to be considered abusive is often a difficult one, business conduct undertaken by a dominant firm that is either listed in Article 82 or that has been condemned by the EC Courts is, in our view, usually taken to constitute an abuse of a dominant position.³³ This is inconsistent with both economic theory and the treatment of business conduct in other areas of competition law.³⁴ Indeed, the OFT guidelines recognises that the Competition Act does not contain a list of business practices that are specifically prohibited. This implies that a detailed case-by-case assessment of the competitive effects of the business conduct under investigation is required. The relevance of legal precedent in such assessments is clearly limited.

An outline for analysing abuse

WHAT CONSTITUTES ABUSE?

- 4.19 Because of the inherent weaknesses in the identification of dominance, the competitive assessment under Chapter II cannot usefully be focused on the issue of dominance. Rather, the competitive assessment should focus on the effects of the behaviour under investigation. This means that investigations under Chapter II ought to place much more emphasis on the real issue of interest – whether the particular conduct constitutes an abuse.
- 4.20 In assessing whether conduct might be deemed abusive, it is necessary to assess whether the conduct adversely affects competition. The guidelines on Chapter II prohibition states that conduct may be considered to be abusive when *'through the effects of conduct on the competitive process, it adversely affects consumers directly (through the prices charged, for*

³² See Section 18(2) of the Competition Act 1998.

³³ See, *inter alia*, Bellamy and Child, *Common Market Law of Competition*, Sweet & Maxwell, 4th ed. 1993

³⁴ Contrast this approach with the approach being developed by the EC Commission in the area of vertical restraints.

example) or indirectly (for example, conduct which raises or enhances entry barriers or increases competitors' costs)'.³⁵ (emphasis added).

- 4.21 In making this assessment it is important to draw a distinction between conduct that inflicts *harm to competition* and that which inflicts *harm to competitors*. In assessing whether business conduct constitutes an abuse, the burden of proof should be placed on competition authorities and particularly on any complainants to show how the conduct adversely affects consumers. As the guidelines makes clear, demonstrating harm to competitors is only important insofar as it leads ultimately to adverse impacts on consumers. It is simply not sufficient to show harm to competitors and thereby conclude that this necessarily has an adverse impact on competition.
- 4.22 As an illustration of this, let us reconsider the Allfoods example. Suppose that Allfoods's conduct is alleged to be abusive because it forecloses the market to its competitors. Abstracting from the issue of whether Allfoods is dominant, let us consider how we might use market evidence to help discriminate between normal competitive conduct and abusive behaviour.
- 4.23 Observed industry behaviour can provide a first indication of the level of alleged foreclosure. For example, the extent to which competitors have been foreclosed can be addressed by considering the number of retailers in which Allfoods' competitors are present and whether competitors have been able to grow their business relative to the market. Although these are not perfect indicators they do provide some useful pointers. If the evidence shows that competitors have grown significantly then there is a rebuttable assumption that the conduct under investigation has not had a foreclosing effect on the market.
- 4.24 The argument that the market position of competitors would have been better if the alleged dominant firm had not engaged in the conduct under investigation is not relevant. Such statements provide no information about whether business conduct gives rise to anticompetitive effects. As the EC Court has stated, even dominant firms are permitted to act in a manner that is consistent with normal commercial practices. That is, dominant firms are not prohibited from competing. The assessment of abuse must therefore determine whether the conduct represents normal business practice or abusive behaviour.
- 4.25 Demonstrating harm to competitors but not harm to competition does not meet this requirement. To the extent that conduct is abusive, then one would expect competing firms to do better once that conduct ceases. But that is also true for conduct that constitutes normal competitive behaviour, since preventing a firm

³⁵ Section 4.2, OFT guidelines on Chapter II Prohibition.

from competing effectively will make competitive conditions easier for competitors. In other words, simply stating that competitors would be better off if the conduct were not practised is insufficient to conclude that the conduct is abusive.

EMPIRICAL MARKET DEFINITION TECHNIQUES IN THE ASSESSMENT OF ABUSE

- 4.26 Interestingly, although empirical market definition techniques cannot usually reliably identify the existence of dominance, they may nonetheless be valuable in the analysis of the alleged abuse, and, in particular, whether the elimination of a particular competitor is likely to lead to a material loss of competition.
- 4.27 In a recent article, Werden eloquently argues that the 'cellophane fallacy' does not affect all non-merger cases and that in some abuse cases the standard approach to market definition remains valid. Specifically, he states:

'When a firm has already raised the price substantially above competitive levels, it makes no sense to determine whether that firm is a monopoly by asking if it could increase its profits through further price increases. Competition of some sort constrains even a monopolist's prices. Hence, in monopoly cases, relevant markets should not include products or areas that are reasonably close substitutes only because price is already substantially above the competitive level. This is the lesson of the Cellophane case. Nevertheless, the Guidelines' hypothetical monopolist paradigm can play several useful roles in many Section 2 [non merger civil] cases.

The Guidelines' approach to market definition is useful in some Section 2 cases because they present precisely the same market-power questions as does the typical merger case. In these cases, the Guidelines' approach, complete with the use of prevailing prices as a benchmark, works for the same reasons it does in merger cases. The cellophane fallacy simply does not arise.

In most merger cases, the issue is whether a proposed merger would create or enhance market power. The prevailing price is the logical benchmark for market delineation because the question posed by Section 7 of the Clayton Act is whether the merger would lessen competition – not how much competition there currently is. Similarly, the issue in many cases arising under Section 2 of the Sherman Act is whether ongoing or

threatened conduct, if left unchecked, would create monopoly power – not whether the defendant already possesses monopoly power.

Section 2 plaintiffs commonly allege that a rival has (recently) embarked on a course of conduct that constitutes an unlawful “attempt to monopolize” because there is a “dangerous probability” that the conduct, if not enjoyed, would create monopoly power. Pleading the case this way raises an issue much like that in a merger case: Assuming the conduct has the alleged exclusionary effect, would the likely result be the creation of monopoly power.’³⁶

- 4.28 While we agree with this reasoning, Werden’s approach does not ‘solve’ the problem as it has typically arisen in a European competition law context, where market definition has been perceived primarily as a tool for the identification of *pre-existing* dominance. A framework for testing for the pre-existence of market power is exactly the role Werden acknowledges that empirical SSNIP test-based market definition cannot play.
- 4.29 It should be noted that Werden’s remarks are made in the context of US antitrust law. Under EU competition law (and by extension, UK competition law following the enactment of the Competition Act 1998), abuse of dominance cases proceed by first addressing whether the firm under investigation is dominant, and, if it is, whether its conduct constitutes an abuse of that dominant position. Within that process, the first and central issue has been whether a firm currently enjoys a dominant position. In contrast, under US law, the competitive assessment asks directly whether the behaviour represents anticompetitive conduct.
- 4.30 Werden’s approach is to treat certain prospective Section 2 breaches of the Sherman Act like mergers because the concern in the law in the US in these cases is not whether market power exists, but whether it would be created or extended by the alleged exclusionary conduct. There is an analogue to this in European law, which is the analysis of the effects of the (exclusionary) abuse on the market. In analysing the consequences of an allegedly exclusionary abuse on competition it may well make sense to undertake a market definition exercise using the SSNIP test and to apply that test at prevailing prices, to understand what are the current competitive constraints acting on the allegedly dominant firm. If the allegation is that the recently adopted or threatened behaviour will result in a reduction of competition, understanding what exactly are the constraints stopping the firm under investigation from raising prices from their

³⁶ G. Werden, ‘Market delineation under the merger guidelines: monopoly cases and alternative approaches’, *Review of Industrial Organisation*, 16: 211-218, 2000

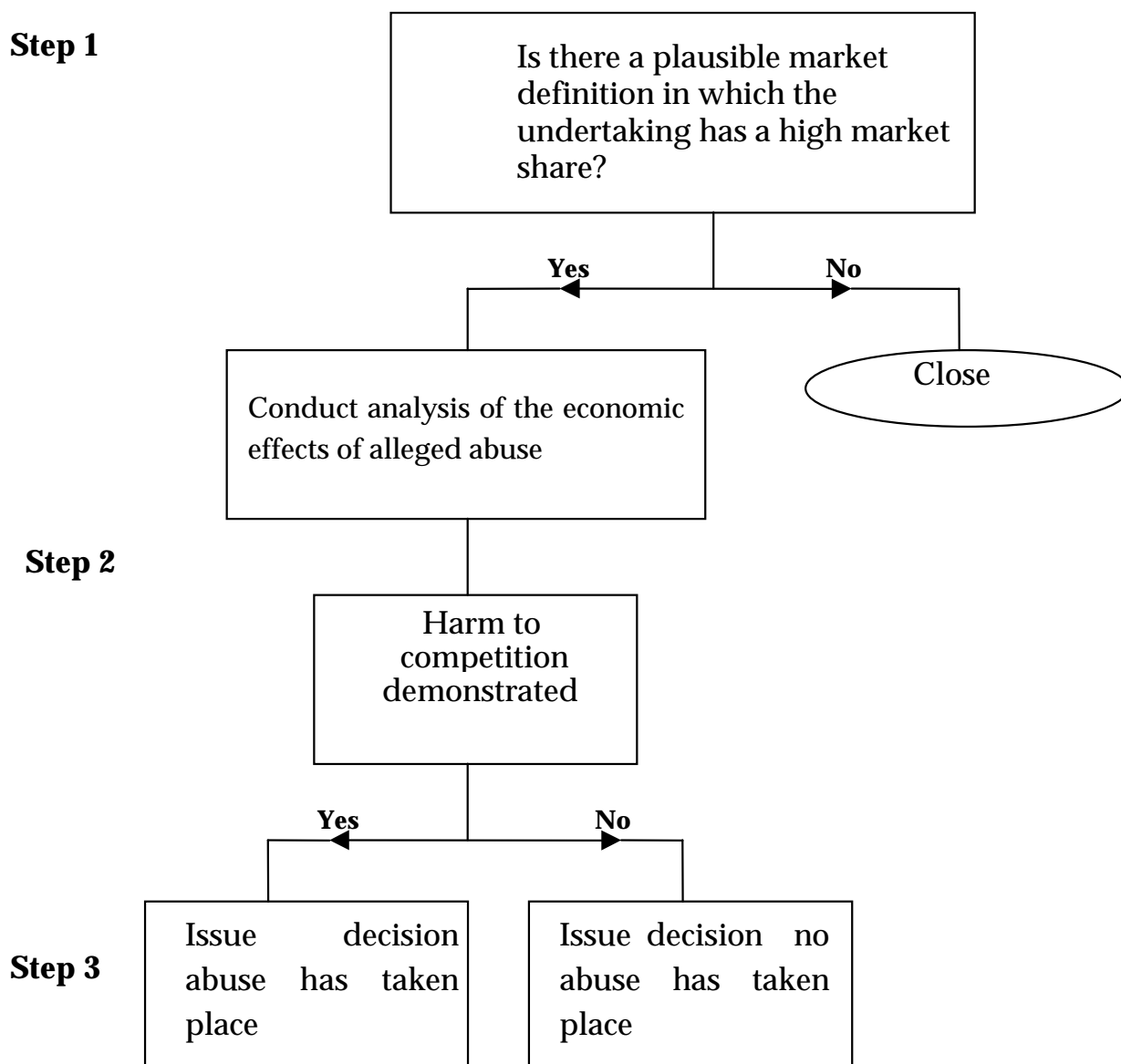
current level is central to understanding the competitive consequences of the exclusion of a particular rival.

- 4.31 However, we would re-emphasise that the kind of market definition exercise needed to identify pre-existing dominance is very different to the market definition exercise that Werden is suggesting for analysing the competitive effects of prospective exclusionary abuses. The Werden rehabilitation of SSNIP test-based market definition does not therefore solve the cellophane fallacy as it applies in the identification of dominance, which is the role that market definition has traditionally served in abuse of dominance cases under European competition law. Moreover, whilst we see a valuable role for the standard market definition test applied at prevailing prices in the analysis of prospective exclusionary abuses, as argued by Werden, such a market definition test has no value in the assessment of long established behaviour whose effect is not to extend the market power of the firm engaged in the behaviour, but to protect its existing market power. In addition, it has no equivalent role in purely exploitative abuse in the form of excessive pricing.

5 SUMMARY AND CONCLUSIONS

In Figure 5.1 below we provide a schematic overview of our suggested approach.

FIGURE 5.1 - FLOWCHART FOR SUGGESTED APPROACH



This shows three steps to the analysis.

Step 1

Assess whether there is a plausible market definition under which the undertaking under investigation has a high market share. By 'plausible' we mean a market defined in a way that:

- it is consistent with the underlying concepts of demand-side and supply-side substitution;

- all products included within the market are substitutes at the prevailing price and have been found to be so using the standard empirical techniques used for market definition in merger cases;
- all claims about substitution based on an analysis of product characteristics have been substantiated with evidence showing that the characteristics cited are the most relevant characteristics in determining demand for the products; and
- any conclusions on dominance drawn from market definition have been augmented with available evidence, such as price-concentration studies or profitability analysis.

Step 2

If there is a plausible market within which the firm might be dominant then conduct a full analysis of the economic effects of the practice under investigation, focussing, in particular on:

- whether the conduct has had or is likely to have an adverse effect on competition, not simply on a sub-set of competitors; and
- whether the standard empirical techniques used in market definition may have a role to play in identifying the competitive impact of recently adopted allegedly exclusionary practices.

Step 3

If competition is likely to have been significantly damaged or there is a prospect of such damage by the conduct then issue a decision that describes and demonstrates the adverse economic effects of the business practice. Alternatively, if the conduct is not harmful then issue a decision giving the reasons why the business practice under investigation does not constitute an abuse of a dominant position.

One potential objection to this suggested approach is the need in some cases to reach a firm conclusion on the appropriate definition of the relevant market. This will be particularly the case where the undertaking has a high market share in one plausible definition of the relevant market but a low one in another. We do not believe that this raises insurmountable difficulties. In any event, having done the assessment of abuse properly it will often be possible to define the market with greater confidence, although as cautioned earlier, care must be taken to ensure that this does not lead to an ex-post justification of the 'I know abuse when I see it' method of analysis. It should be noted that under the EC Merger Regulation numerous decisions leave open the precise definition of the relevant market.

A A HYPOTHETICAL WORKED EXAMPLE

- A.1 In this section we develop a hypothetical example to illustrate the approach that we would advocate applying to the analysis of allegations of abuse of dominance. In this example, the Office has received a complaint from *Big Yawn Ltd*, a publisher of reference and guidebooks. It has alleged that *ZZZZ Publishing Ltd* (*ZZZZ*) has abused its dominant position in the market for the supply of golf-related magazine advertising in the UK.
- A.2 *ZZZZ* publishes *The Putter*, the most popular specialist monthly golf magazine in the country. In addition, *ZZZZ* publish the *ZZZZ Golf Guide*, which provides comprehensive information on the courses and facilities at all British golf courses. It is updated and published annually.
- A.3 *Big Yawn* does not publish a monthly golf magazine, but does publish *The British Golf Handbook* that contains unique editorial material and features, but provides essentially similar factual information on the courses and facilities to that contained in the *ZZZZ Golf Guide*. It too is updated annually. *Big Yawn* launched the *British Golf Handbook* in January 1991 and after lengthy negotiations with *ZZZZ*, *ZZZZ* eventually agreed to carry advertisements for it in *The Putter*, starting in January 1994. At the end of December 1997, *ZZZZ* told *Big Yawn* that it would no longer be carrying advertisements for *The British Golf Handbook* in *The Putter*. *Big Yawn* alleges that this refusal was motivated by *ZZZZ*'s desire to see the *Big Yawn* publication shrink or disappear leaving *ZZZZ* with a second dominant position in the supply of British golf course guidebooks. It is *ZZZZ*'s refusal to offer advertising space to *Big Yawn* that constitutes the alleged abuse.
- A.4 *ZZZZ* claims that it does not hold a dominant position in the market for magazine advertising aimed at golfers because it is in active competition with at least four other publications for the business of golf related advertisers. These are *Hole-in-One*, like *The Putter*, a magazine dedicated exclusively to the coverage of golf; *Sports Addict*, a general sports magazine with a regular golf section; *Modern Sportsman*, a general interest sports magazine with occasional golf coverage; and *Pursuits*, a general interest magazine aimed at ABC1 men over 35 that has extensive golf coverage and features, as well as numerous features unrelated to sport (e.g. on cars, politics, etc.). In addition, it claims that advertisers of golf related goods and services have numerous ways to market their products without necessarily needing to engage in magazine advertising of their products.

A.5 The monthly circulations of each of the allegedly competitor magazines are set out below.

<i>The Putter</i>	200,000	20.0%
<i>Hole-in-One</i>	75,000	7.5%
<i>Sports Addict</i>	175,000	17.5%
<i>Modern Sportsman</i>	125,000	12.5%
<i>Pursuits</i>	425,000	42.5%

A.6 As with the current procedure we would suggest that the initial examination of this hypothetical case begins with an attempt at market definition. In this case, for example, one might conduct as comprehensive a product characteristics analysis as is possible, bearing in mind that in this case the product is the supply of advertising services, although it may well be closely related to the market for readers, since it is the delivery of relevant readers that comprises the central component of the advertising services supplied to advertisers. An analysis of product characteristics may involve looking at the proportion of golf related advertising carried in each publication, the socio-economic make-up of the readerships and their hobbies and interests.

A.7 This analysis shows that the readership of *The Putter* is rather older and wealthier than that of the *Hole-in-One* but that a significant proportion of both readerships are keen golfers themselves. The readerships of *Sports Addict* and *Modern Sportsman* are both diffuse in socio-economic terms, but only a small proportion of the readership of *Modern Sportsman* are interested in golf and an even smaller proportion plays it. The readership of *Pursuits* is socio-economically similar to that of *The Putter* and despite it not being a dedicated sports magazine significant proportions of its readership are interested in and play golf. The results of the characteristics analysis are summarised below.

Publication	%ABC1	%C2DE	%Golf Interest	%Golf Play
<i>The Putter</i>	73%	27%	100%	71%
<i>Hole-in-One</i>	42%	58%	100%	76%
<i>Sports Addict</i>	48%	52%	46%	19%
<i>Modern Sportsman</i>	46%	54%	19%	9%
<i>Pursuits</i>	91%	9%	58%	41%

A.8 Unsurprisingly, this seems to suggest that *The Putter* is likely to face direct competition from *Hole-in-One* for those interested in golf and from golfers themselves. Thus both of these would appear to be attractive to advertisers seeking to reach a concentrated golf readership. In addition, the profile of

readers suggests that *Pursuits* may also place a significant constraint on the two specialist golf magazines due to the high level of interest in golf from its readership. It would appear that this constraint might be particularly intense for *The Putter*, because of *Pursuits* strong appeal to ABC1s who also comprise a significant proportion of the readership of *The Putter*.

- A.9 We would then suggest that any evidence on substitution at existing prices be gathered and analysed, in the same way that one would in a merger case. Because of the 'cellophane fallacy' one cannot infer from the existence of substitution at existing prices that a particular product would constrain *The Putter* at competitive prices. Nevertheless, it may be possible to identify wholly irrelevant products (i.e. those that are not even substitutes at current prices). These can then be dismissed from consideration for the remainder of the investigation.
- A.10 Evidence of substitution at existing prices could take any of the forms familiar from market definition in merger cases. However, for the purposes of this example, we can imagine that there was a two-month period around 18 months ago when *The Putter* was not published due to industrial action by staff at ZZZZ (a relevant market 'shock'). Six months ago *The Putter* raised its advertising rates and attempted to pass on the same increase on its discounted rates (permitting an approximate estimation of the own-price elasticity and cross-price elasticities for a variety of potential competitor products). The effect of the industrial action at ZZZZ is set out below.

TABLE A.1 - EVIDENCE OF SUBSTITUTION AT CURRENT PRICES

	Industrial action	Advertising rate rise
<i>Hole-in-One</i>	Added four extra pages to accommodate an increase in total advertising from 16 pages to 20 pages in the two editions that faced no competition from <i>The Putter</i> . Even then it had to suspend discounts for all but its five biggest advertisers to constrain demand to 16 pages.	Held its existing rates for 3 months, but selectively reduced discounts. Subsequently added two extra pages of advertising and ultimately raised its rates by 75% of the increase levied by <i>The Putter</i> .
<i>Sports Addict</i>	Did not add extra pages for its editions, but was only required to give an average discount of 12% to fill its advertising space in those editions, rather than its usual 25% discount. Moreover, golf related advertisements accounted for 17% of the total in those two months compared with 8% normally.	Selectively reduced its discounts to 22% from 25% and initially golf-related advertising rose to between 10% and 12%, but this fell back to its previous level of 8% after the <i>Hole-in-One</i> finally raised its rates. Rates were raised 6 months later in line with its normal rate review procedure.
<i>Modern Sportsman</i>	Neither added pages nor achieved a noticeably higher average rate for its space. It did notice that golf related advertising rose from its normal 2% to 5% in those months.	It is claimed that the amount of golf-related advertising rose slightly, but not by a significant amount. It reviewed its rates at the same time as <i>Sports Addict</i> .
<i>Pursuits</i>	Expanded its usual 8-page golf section to 12 pages, two of which were devoted to advertisements. It had to offer average discounts of only 18%, rather than 24% for the magazine as a whole, but offered no discount on advertising in its golf section, instead of the normal 20%. Some golf advertisers took space in the non-golf sections; something they normally did not do.	Average discounts fell from 24% to around 20%. It considered permanently adding extra pages to the golf section, but did not do so. It increased its general advertising rate in line with inflation and noticed that the average level of discounts in the golf section settled at around 15% compared to the 20% that prevailed previously.

Source: Competitor questionnaire responses

A.11 On the basis of the analysis of these two market events, and in the light of the detailed product characteristic analysis, it seems reasonable to conclude that *Modern Sportsman* constitutes at best a minimal competitive constraint on *The Sportsman*, even at current prices. With *Modern Sportsman* excluded from the market the revised market shares are:

<i>The Putter</i>	200,000	22.9%
<i>Hole-in-One</i>	75,000	8.6%
<i>Sports Addict</i>	175,000	20.0%
<i>Pursuits</i>	425,000	48.6%

A.12 However, because of the 'cellophane fallacy' it cannot be conclusively shown that the substitution that currently exists between *The Putter* and *Sports Addict* and *Pursuits* is taking place at competitive prices. Consequently it is not possible to discriminate between a market definition that includes these publications and a narrower market definition that includes only *The Putter* and *Hole-in-One*. On this very narrow market the shares would be:

<i>The Putter</i>	200,000	72.7%
<i>Hole-in-One</i>	75,000	27.3%

A.13 Under one plausible definition of the market *The Putter* would have 72.7%, whilst under another, equally plausible definition, it would have less than 23%. At this stage it would make sense to undertake an analysis of the barriers to entry that exist into the narrower market. This might entail an analysis of the history of entry into the dedicated golf magazine market and a close examination of any failed entry attempts. For the purposes of this example it can be assumed that barriers to entry have been identified and that the company structure and the accounting data at ZZZZ does not exist in a form that will permit a robust analysis of the individual profitability of *The Putter* to be undertaken. As a consequence it is not possible to advance the analysis of dominance any further. The ambiguity of the dominance finding means that significant emphasis must be placed on the analysis of the effects of the alleged abuse.

A.14 We believe that in any abuse case the complainant should be required to articulate exactly how the alleged abuse is supposed to translate into harm to the competitive process and ultimately to consumers rather than merely to show harm to its own commercial interests.³⁷ In this case Big Yawn has alleged that

³⁷ The complainants in Article 82 cases and, we envisage, in most Chapter II cases under UK law are likely to be competitors.

denial of advertising space in *The Putter* will seriously damage its ability to compete in the market for the supply of golf guidebooks, leaving ZZZZ with a dominant position that may ultimately harm consumers through higher prices for golf guides.

- A.15 This line of argumentation can be rigorously analysed. First, one can attempt to define the market in which the *ZZZZ Golf Guide* actually competes. This can be done using the standard techniques, as the 'cellophane fallacy' does not hold in this market due to its currently competitive nature. Thus, all available evidence can be brought into play to try to identify those products that on the basis of substitution at existing prices should form part of the relevant market in which the *ZZZZ Golf Guide* competes. Suppose that using standard techniques it is possible to identify four products that currently compete with the ZZZZ product. These products and their circulation shares are:

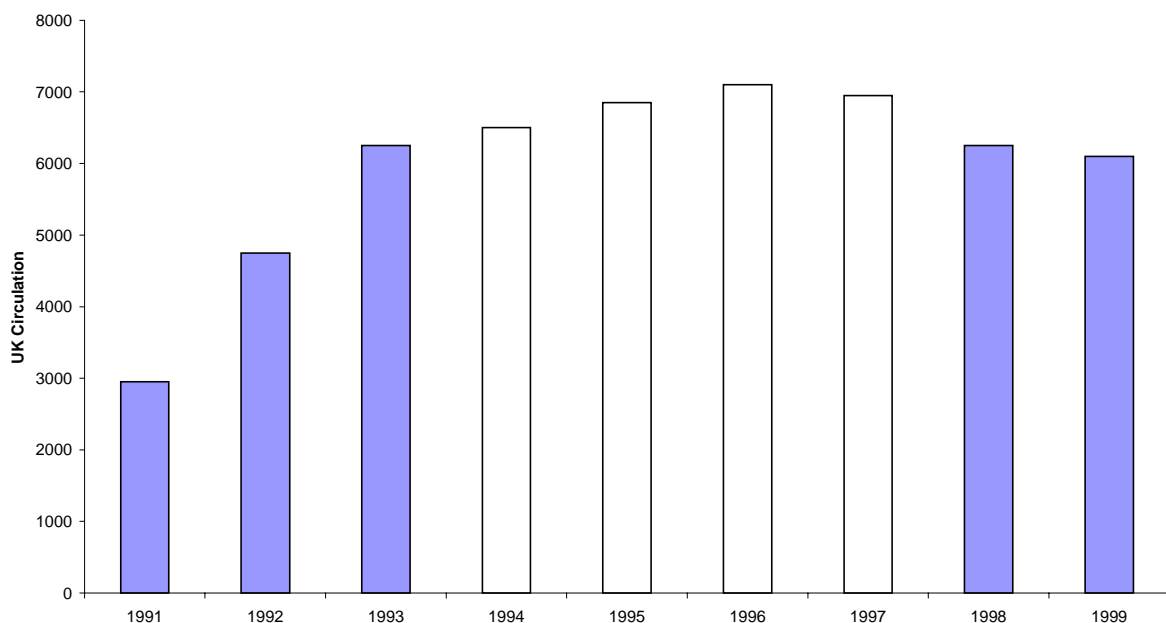
Product	UK Circulation	Share
<i>ZZZZ Golf Guide</i>	12,000	24%
<i>The British Golf Handbook</i>	6,000	12%
<i>European Golf Guide</i>	15,000	30%
<i>Golf Courses of Europe</i>	10,000	20%
<i>Encyclopaedia of Golf</i>	7,000	14%

- A.16 On the basis of these shares it would appear to be difficult to argue that ZZZZ would hold a dominant position in the supply of golf guides simply by eliminating from the market *The British Golf Handbook*. However, it may be that ZZZZ's new practice of denying advertising space to rival golf guide publishers would harm all of its existing rivals. This would suggest that an analysis of their current marketing is required.
- A.17 This analysis shows that the two European golf guides, although published in English, have a substantial circulation outside the UK and that they are promoted in Europe in non-ZZZZ publications. In the UK, *European Golf Guide* relies heavily on advertising in *Pursuits* and *Golf Courses of Europe* sponsor a tournament in the UK rather than advertise in any magazines. *Encyclopaedia of Golf* advertises in several magazines, but also has a joint marketing deal with *Sandtrap Sam's* a major chain of golf stores selling golf equipment and clothing. The diverse marketing strategies of these rival publications tend to suggest that none of ZZZZ's commercial policies with regard to the carrying of advertisements in *The Putter* are likely to have any material impact on the viability of these publications in general or their circulation in the UK in particular.

A.18 Furthermore, evidence from the sales figures for *The British Golf Guide* show that the benefits from advertising in *The Putter* over the two years that it carried the advertisement are not so great as to prevent it from gaining adequate circulation without such advertising. Sales rose successfully prior to the beginning of the advertisements in *The Putter* and although there has been some slippage of sales following the ending of the advertisements this had not had a dramatic effect on sales. Big Yawn argue that this is because it has had to engage in other, more costly marketing to achieve the same effect, but acknowledges that although its profits have fallen, it remains profitable at current levels of circulation and advertising spend.

A.19 The evidence on the effects of the alleged abuse is therefore reasonably clear. The future viability of the Big Yawn product does not appear to be jeopardised by the loss of advertising in *The Putter* and, even if its existence were jeopardised, the market structure for guides appears to be one that would remain competitive even without *The British Golf Handbook*. On the basis of this evidence we would dismiss the case as one in which even if dominance existed, the effects of the observed behaviour were not abusive when judged against established competition criteria.

Sales of The British Golf Handbook, 1991-1999



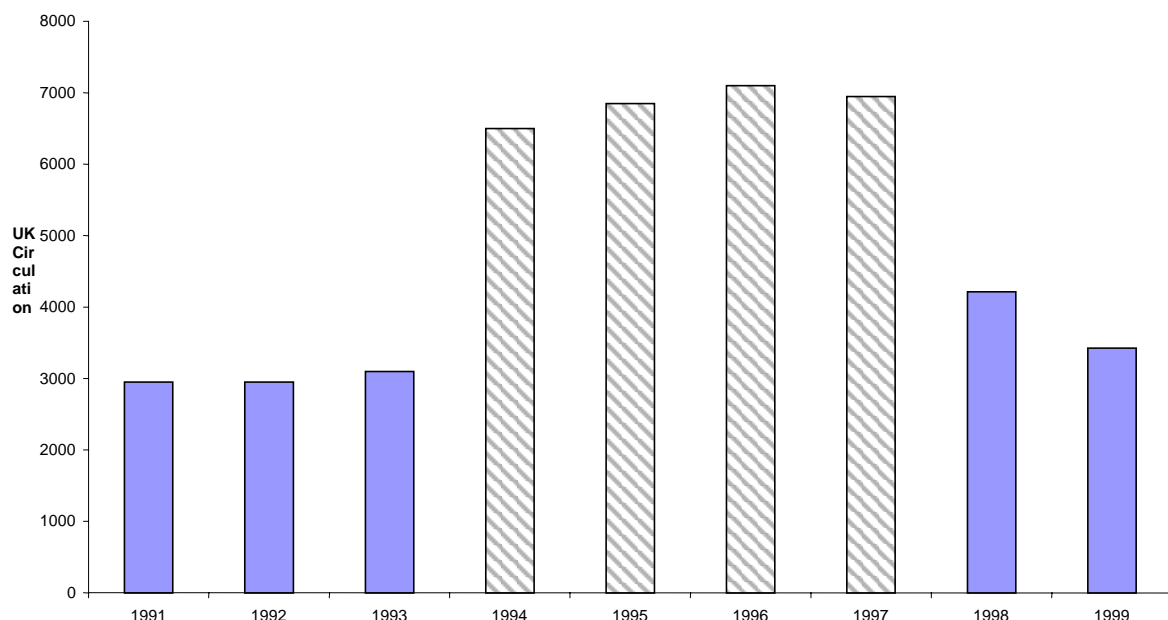
An alternative scenario

A.20 Conversely, however, our analysis of the effects of the abuse may have been different. For example, the market definition exercise may have identified only *The British Golf Handbook* as in active competition with the ZZZZ publication. Evidence on substitution may have shown that the other, mainly European focussed products did not constrain the pricing or other behaviour of ZZZZ and that competition with *The British Golf Handbook* was central to the maintenance of effective competition in this market. In this narrower market the shares would be:

Product	UK Circulation	Share
<i>ZZZZ Golf Guide</i>	12,000	67%
<i>The British Golf Handbook</i>	6,000	33%

A.21 Now the elimination of *The British Golf Handbook* would clearly have significant competitive consequences if the alleged abuse were seriously to jeopardise the existence of the smaller publication. And, in this second case, we now find that when the effects of the denial of advertising are explored in depth there has been a major impact.

Revised Sales of The British Golf



A.22 Despite the best efforts of Big Yawn to explore alternative marketing strategies we now find that its circulation has declined markedly without access to *The*

Putter and at current circulation levels and with its current advertising budget it is doubtful whether *The British Golf handbook* is viable.

- A.23 In this latter case there is clearly a much stronger argument for intervention based upon the effects of the abuse. In this case, and partly in the light of the dramatic effects that its commercial policies are capable of having in associated markets, it would be legitimate to conclude that ZZZZ were dominant in the market for golf-related magazine advertising services. Moreover its behaviour in denying advertising space to Big Yawn indeed constitutes an abuse within that market and should be seen of an abuse of a dominant position.