HM TREASURY

OFFICE OF FAIR TRADING

Guidance on how to assess the competition effects of subsidies

January 2007

OFT829

CONTENTS

The guidance in brief

The objective of this guidance is to enable subsidy providers to assess whether a proposed subsidy is likely to have a significant effect on competition and, if this is the case, incorporate this effect into the wider appraisal of the subsidy.

The guidance applies to subsidies that carry the highest risk of distorting competition. These are subsidies of more that £500,000 to an individual firm which has a market share exceeding 5 to10 per cent of the affected market.[1] [2]

Subsidy granted in the following circumstances is excluded from further assessment:

- situations in which commercial or non-commercial bodies are paid for undertaking specific tasks in line with public sector procurement rules or for undertaking a statutory obligation, and
- situations in which the support is state aid that has been permitted under the Community guidelines on State Aid to promote risk capital investments in small and medium sized enterprises, or the Community Framework for State Aid for Research, Development and Innovation.

The assessment of such supports should examine whether either of the following adverse effects on competition are likely:

- the subsidy changes the market so that there is a greater risk of abusive behaviour. This is possible if, as a consequence of the subsidy

---

[1] The term 'subsidy' means a grant, soft-loan, loan guarantee, tax break or benefit in kind granted through government resources that affects the costs of at least one recipient undertaking. Included in this definition are supports for non-commercial bodies in circumstances in which they compete with commercial enterprises.

[2] The guidance need only be applied when all three criteria are met.

- the recipient increases its market share to a level at which it has power to behave independently of competitive pressures, allowing it to raise its prices profitably
- there is consolidation amongst competitors to an extent that reduces competition or increases the risk of collusion, or
- entry barriers are raised that insulate the firms in the industry from competitive pressure.

- the subsidy undermines the mechanisms for ensuring efficiency in the market to an extent that:
  - competitors are forced to exit the market, reduce their long-term investment or reduce employment, for example, in order to ensure their short-term survival
  - the subsidy recipient is under less financial pressure to be competitive
  - an inefficient recipient is able to remain in the market, or
  - it is worthwhile for market participants to spend significant sums of money seeking out subsidies.

These outcomes depend on a number of factors including the size of the subsidy, whether the subsidy can be used at the recipient's discretion and the strength of competition in the recipient's market.

If this analysis indicates that significant effects, such as the ones above, are likely then the subsidy provider should consider redesigning the subsidy in order to reduce these. Remaining significant effects should be incorporated into the overall appraisal of the costs and benefits of the subsidy as required by the Green Book and other appraisal guidance, such as the Scottish Public Finance Manual, based on it. In the case that this tips the balance such that the expected costs of the subsidy exceed its benefits, then the subsidy award should be reconsidered.

Almost all UK subsidies are state aid, and therefore need to comply with the European State Aid rules.[3] These rules place legal obligations on Member States which must be adhered to regardless of the application of this guidance.

[3] The State Aid Policy Unit in DTI can provide advice on compliance with state aid rules. See also www.dti.gov.uk/bbf/state-aid/index.html and www.dti.gov.uk/files/file13713.pdf.

1 INTRODUCTION

1.1 There are a wide variety of government activities that provide support to those engaged in production or provision of a commercial service. For the purposes of this report 'subsidy' is defined as a grant, soft-loan, loan guarantee, tax break or benefit in kind granted through government resources that affects the costs of at least one recipient undertaking. The term 'undertaking' covers any natural or legal person engaged in economic activity, regardless of its legal status and the way in which it is financed.[4] Situations in which commercial or non-commercial bodies are paid for undertaking specific tasks in line with public sector procurement rules or for undertaking a statutory obligation are also excluded from this guidance.

1.2 Subsidies are used to promote a wide variety of government policies and address a range of market failures. For example, the government invests in Regional Venture Capital Funds to enable them to provide start-up and growth funding to small enterprises. Infrastructure development by private firms has been supported in some areas. Grants are sometimes used to promote cultural and recreational facilities.

1.3 An unintended consequence of subsidies is that these can distort competition between firms undertaking similar activities, particularly when subsidies are large and only available to a selection of the firms that compete with each other.

1.4 This guidance explains why it is important to consider the effects of any proposed subsidy on competition and sets out guidance for assessment of subsidies that carry a particularly high risk of distorting competition.

---

[4] The meaning of 'undertaking' has been set out in European Community law. It includes social and government enterprises where these are engaged in economic activities. In this guidance we will use the word 'firm'.

1.5 The guidance allows a subsidy provider to reach one of three conclusions:

- the subsidy is unlikely to distort competition significantly
- the subsidy is likely to give rise to significant distortions to competition but, when the total benefits and costs are considered, the subsidy is justified as it generates an overall benefit
- the subsidy is likely to give rise to distortions to competition that outweigh the benefits that would arise from it.

1.6 Responsibility for the assessment of competition lies with the government department or agency that is responsible for the introduction or renewal of the subsidy. In this way, any detriment to competition can be examined alongside the other costs and benefits of the proposed subsidy.

Relationship to state aid rules

1.7 Almost all subsidies are state aid, as defined by article 87(1) of the EC Treaty. As such it is necessary for these to comply with European state aid rules. This guidance is designed to ensure that subsidies which are approved under the European State Aid rules (and the few subsidies that are not state aid), but which carry the risk of distorting competition are subject to a competition assessment before they are awarded.[5] Aid providers should find that it becomes easier to persuade the Commission to approve aid, if the aid requires notification to Brussels, if a competition assessment has been done in line with this guidance.

1.8 The state aid rules are currently undergoing a process of reform in order that the decision of whether or not to permit an aid is based much more closely on an economic view of whether that aid will distort trade and competition. The UK government is supporting these reforms. **For this**

---

[5] See note 3.

reason aid that is approved under a reformed State Aid guideline that includes a balancing test or similar economic assessment is exempt from further competition assessment at the national level.

Structure of the guidance

1.9 The structure of the guidance is as follows:

- section 2 gives the rationale for assessing competition effects when appraising subsidies
- section 3 gives further detail on the scope of the guidance, and
- section 4 sets out the competition assessment.

2 THE RATIONALE FOR ASSESSING COMPETITION EFFECTS WHEN APPRAISING SUBSIDIES

2.1 This section describes the effect that subsidies may have on competition.

How subsidies may distort competition

2.2 Efficient competitive markets are created by a process of rivalry between firms engaging in a commercial struggle to be profitable. Competition, through efficient markets, delivers lower prices, greater choice and more popular products to consumers.[6]

2.3 The provision of subsidies to a recipient will impact on the recipient's costs (either fixed or variable) and so will affect its decisions concerning what to produce, how much to produce, how to produce it and what to charge for it.

2.4 If a subsidy recipient's actions are affected, competing firms may also react by adjusting their behaviour. In response, subsidy recipients may adjust their behaviour again prompting second round and third round effects.

2.5 A subsidy may be given to address a market failure. For example, it has been suggested that the market on its own fails to generate enough training because firms do not take into account the wider benefit to the economy of training. A subsidy scheme could be used to encourage all firms to undertake more training to raise the total amount to the appropriate level. Alternatively a large subsidy could be given to a single firm to enable it to increase its training. Whilst both subsidies would address the market failure, the latter is likely to distort competition significantly as the recipient's competitors become less able to compete.

---

[6] For a more extensive summary see the OFT's *Guidelines for Competition Assessment: A guide for policy makers completing Regulatory Impact Assessments*, Chapter 2.

2.6 The above case is an extreme example. However, giving some firms an advantage over their competitors in a smaller way can still affect the actions of the firms in the market. These changes could affect the efficiency with which the market allocates goods and determines prices. Specifically a subsidy could have the following effects:

- it changes the market so that there is a greater risk of abusive behaviour. This is possible if, as a consequence of the subsidy
  - the recipient increases its market share to a level at which it has power to behave independently of competitive pressures, allowing it to raise its prices profitably
  - there is consolidation amongst competitors to an extent that reduces competition or increases the risk of collusion
  - entry barriers are raised that insulate the firms in the industry from competitive pressure.
- it undermines the mechanisms for ensuring efficiency in the market to an extent that
  - competitors are forced to exit the market, reduce their long-term investment or reduce employment, for example, in order to ensure their short-term survival, or
  - the subsidy recipient is under less financial pressure to be competitive
  - an inefficient recipient is able to remain in the market
  - it is worthwhile for market participants to spend significant sums of money seeking out subsidies.

3 SCOPE OF THE GUIDANCE

3.1 The guidance applies to subsidies that carry the highest risk of distorting competition. These are subsidies of more that £500,000 to an individual firm which has a market share exceeding 5 to 10 per cent of the affected market.[7] Certain types of subsidies have been exempted. The following section explains which subsidies are covered in greater detail.

Is the subsidy more than £500,000?

3.2 The guidance applies to subsidies where the **total public funding** in a policy, programme or project will benefit an individual recipient by more than £500,000 in a period of three fiscal years.

Is it made to an individual firm or group of firms?

3.3 The guidance applies when the subsidy is awarded to one or more firms but is not made available to its competitors or potential competitors which could also address the market failure in question.

Examples

3.4 The guidance would apply to a subsidy over £500,000 to a firm that had sought support with investment to increase capacity and employment (in an area where failures in the labour market had been identified). This subsidy is not generally available to firms that could also increase their capacity.

3.5 The guidance would not apply to support given to Regional Venture Capital Funds as all firms with the capacity to offer venture capital to small and medium-sized enterprises under specified terms, had the

---

[7] The competition assessment set out in Section 4 of this guidance is only required if the subsidy meets all three criteria. For subsidies that do not it may still be appropriate to consider the principles underlying this guidance.

opportunity to become Regional Venture Capital Funds and thus access funding.[8]

3.6 The guidance would not apply to training aid to address a regional market failure that was offered on equal terms to all firms in the region.

Is the market share of the recipient greater than 5 to10 per cent?

3.7 To assess market share it is important to consider the market(s) affected by the subsidy. The 'affected market' consists of the subsidy recipient and firms that compete with it to produce the same, or a similar product or service. If the recipient produces multiple products then the market should be considered for the product that is targeted by the subsidy (if there is one). If the subsidy is not targeted at a particular product, the main product lines should be considered.

3.8 Recipients can often give an immediate view of their market position, which can be used as a starting point.

3.9 Markets for inputs and downstream markets may also be affected by the subsidy but effects in these markets are only likely to be significant if the recipient is a major player. One example is support to commercial training centres that enables them to compete with other training centres but also benefits firms that can use the training centre at a price that reflects that the centre has received government support.

Market definition

3.10 The affected market can be considered by taking the products or services produced by the subsidy recipient and looking at the closest substitute products - those which consumers might switch to if prices of the recipient’s products rose. Consumers may also switch from products supplied in one area to ones supplied in another.

---

[8] The process for becoming a Regional Venture Capital Fund has been simplified here for ease of explanation.

3.11 Similarly, if prices rise for one type of product in an area, other producers will switch to selling this product, or start supplying this area. If producers can make this change quickly consumers will be provided with substitutes. For example, paper is usually supplied in a range of different qualities, from standard writing paper to high quality paper used for art books. Users will not switch between different qualities of paper in response to a price rise, that is, an art book will not change to lower quality paper. However, paper plants can adjust production with negligible costs and in a short time frame to supply more of the quality of paper that has increased in price.

3.12 A useful intuitive means of addressing market definition is the 'hypothetical monopolist' test.[9] This test asks if there was a sole supplier of a set of goods or services in a particular area, whether that supplier could profitably raise prices by a significant amount (five to 10 per cent) above the competitive level.

3.13 The test can be applied as follows:

- take the single affected good as a starting point and ask the question: if this good was supplied by a single firm, would it be profitable for that firm to increase the price by a small but significant amount (five to 10 per cent)?

- if the hypothetical monopolist could not increase prices, because it would lose profits (for example, because other firms would enter the market and offer alternative goods or because consumers would switch to alternatives that were almost as good), then the market is too narrowly defined. The next best substitute for the good would be added to the set of products being considered, and the test performed again, and

- if a hypothetical monopolist could profitably increase prices by five to 10 per cent, then the market is defined appropriately.

[9] This test is also known as a SSNIP test.

3.14 The OFT guideline on **Market Definition** gives more detail on the process of market definition.[10] It is recommended that subsidy providers seek the support of departmental economists when undertaking or reviewing market definition.

Calculating market size and shares

3.15 Once the affected markets have been identified the market size and market share of the subsidy recipients can be tested.

3.16 We recommend that where possible, subsidy providers seek estimates of market size and share from recipients. These can then be critically examined by the subsidy provider.

3.17 Estimates of market size by revenue might be derived from one or more of the following sources:

- market research reports such as those produced by Mintel, Keynote and similar companies
- public statistics
- competition policy cases (where these have undertaken a market definition, they will often contain market size and market share data)[11]
- accounting data on turnover of recipients and their competitors in the market (although in many cases turnover data will be for the recipient as a whole, not necessarily turnover in the market concerned), and

---

[10] This is available at: www.oft.gov.uk/NR/rdonlyres/972AF80C-2D74-4A63-84B3-27552727B89A/0/OFT403.pdf

[11] Care should be taken when using past competition policy cases as market definition can change over time so there is a risk that this information could be out of date.

- data or estimates from the subsidy applicant. These estimates could be tested by subsidy providers by asking other market participants for their estimates of the market size and shares.

3.18 Once the size of the market has been estimated, market shares should be calculated for each subsidy recipient as the proportion of market turnover accounted for by them.[12]

Example of assessing market share

This is a hypothetical example designed to demonstrate how market share should be considered. It is modelled on the type of subsidy that can be used for regional development purposes. However it is fictitious.

A snacks manufacturer, 'Caspiar', is seeking £1m to extend its existing plant in order to increase its manufacture of different flavours and types of potato crisps. The manufacturer argues that without £1m in support it will be cheaper for it to locate in north west France and produce crisps branded for the UK market.[13] The grant provider is considering the application seriously as it might create/safeguard 100 jobs in a deprived area.

a) First the market needs to be defined: The affected products are several types of crisps; some that are sold in bags for one person (often as lunchtime snacks) and some more luxury types for dipping that are sold in larger packs. Based on information from the company, supported by media reports on savoury snacks, a 5 per cent rise in the price of either type of crisp would result in customers switching to similar products. This

[12] Subsidy providers should consider whether the market share of any of the recipients is more than 5 – 10 per cent. This range allows some flexibility so subsidy providers can take into account factors such as the accuracy of their data.

[13] In considering this subsidy it is worth considering which aspects of the region contribute to higher costs for industry and addressing these directly, rather than subsidising a firm to enter. If such a subsidy is likely to be effective it could be a way of minimising the potential for distortion to product markets.

would render the price rise unprofitable so the different crisps cannot be considered to be a market in themselves.

b) Considering customers switching to other snacks, information from Caspiar, its competitors and some merger decisions[14] suggest that crisps cannot be considered as a market on their own as a 5 per cent rise in the price of crisps would lead people to choose other savoury snacks.

c) Indications are that a 5 per cent rise in the price of savoury snacks would not lead to substitution for sweet snacks or snacks that required preparation.

d) In terms of the geographic market, although some regional brands may exist, these would have to compete with snacks sold nationally. However, a rise in price of savoury snacks in the UK is unlikely to give rise to a significant response from international competition in the short term. This is because particular taste and brand recognition are important to consumers and so a snack designed for the European market could not quickly come in to take advantage of a price rise. [Similarly 30 per cent of consumer purchases of savoury snacks are made on impulse so these are unlikely to be imported by consumers.]

e) Savoury snacks in the UK appear to be the appropriate market for analysis.[15]

f) According to Caspiar, it accounts for 5.3 per cent of savoury snacks sales in the UK. (Information from market research companies corroborates this.)

g) As the subsidy is to an individual firm, exceeds £500,000 and is for a recipient with more than 5 per cent market share and this is likely to

---

[14] Nabisco Brands Inc and Huntley Palmer Foods PLC, MMC 1982 and Proposed acquisition by Frito Lay Trading Co GmbH, a subsidiary of Pepsico Inc, of certain assets of the Golden Wonder Group Ltd, namely the Wotsits brand and associated production and distribution facilities, OFT 2002.

[15] It should be noted that this is a hypothetical example that demonstrates how the market might be identified for the purposes of anticipating the effects of a subsidy. It does not represent the OFT's view on market definition in any actual savoury snack market for the purposes of applying competition law.

increase as a consequence of the subsidy, it is appropriate to undertake the competition assessment.

4 THE COMPETITION ASSESSMENT

4.1 There are two important elements of the process:

- detailed investigation of whether material competition effects are likely to arise from the subsidy, and
- consideration of what to do if it is likely that material competition distortions would arise from the subsidy.

These are discussed in turn.

Detailed analysis of the likelihood of competition distortions

4.2 This analysis should be undertaken by departmental economists where they are available. Unless quantitative information is readily available it is appropriate to use qualitative information for assessment purposes.

Making the right comparison

4.3 The competition assessment compares what will happen in the affected markets if the subsidy is permitted against what will happen if it is not (the 'do minimum' option). This evaluation allows the additional impact of the subsidy upon competition to be estimated. For example, in an industry that is undergoing a period of consolidation and increasing concentration, competition in the market could be expected to change in the future regardless of subsidy decisions. Such expected changes should be taken into account when undertaking the analysis.

Subsidies that affect location

Often the objective of a subsidy is to influence the location of a firm. If the firm's activities, especially its level of output, are different in the location where the firm is subsidised, to its preferred location without the subsidy, then the subsidy will affect the product market in which the firm operates. In this situation the analysis below is appropriate.

If, however, the firm's activities would be identical in the two locations, the customer base is no different between the locations and the subsidy is offered to overcome the additional costs of operating in one location (and no more), then there will be no direct effect on the product market in which the firm operates. In this situation the location choice may have effects on local input markets and downstream markets which could then affect the product market. This possibility needs to be considered. (see para 4.22 to 4.24)

Subsidy characteristics

4.4 The following characteristics, based on previous research by the OFT,[16] can be used to ascertain whether the risks of market distortion described above are likely to arise.

Subsidy size

4.5 This indicates the scale of potential advantage being conferred on the recipient(s) and the possible scale of any effect on the market. This should be considered in a relevant context as a subsidy of £500,000 to a firm with costs of £20m per annum will generally have a smaller effect on the firm than the same subsidy given to a firm with costs of £1m per annum.

4.6 There are a number of different ways in which context may be put on the size of the subsidy provided. These include:

---

[16] Public subsidies: A report by the Office of Fair Trading, OFT750, November 2004

- total value of the market
- the total investment value – where some investment will be undertaken in addition to, or without the subsidy being provided
- the costs of the firm – fixed costs, variable costs or total costs, dependent on which of these the subsidy is targeted at, and
- the time-span over which subsidy is provided – the time-span of the subsidy and investment can provide an indication of the longevity of any effect on the market.

Targeted subsidies

4.7 Subsidies that are closely targeted at the particular policy objective would be less likely to have a significant effect on competition. The intuitive reason for this is that if a subsidy is granted with few restrictions on its use, the recipient may choose to use it in the most profitable area of its business. Therefore, it is useful to consider whether the subsidy is targeted towards activities that the recipient is unlikely to wish to undertake for commercial reasons (such as reducing environmental impact of production) or for purposes that give a commercial benefit. Monitoring to ensure that the subsidy is indeed used in the intended manner is a responsibility of the subsidy provider.

4.8 Subsidies that are targeted to finance the restructuring of a firm or tide it over a difficult period should be examined particularly carefully as these are used directly to support a firm and inhibit the market mechanisms that would cause it to go out of business.

Effect on costs

4.9 Different types of subsidies are likely to affect firms in different ways, with some subsidy packages having a direct effect on the marginal costs of firms,[17] while other subsidy packages may focus more on assisting with fixed set-up costs of establishing or expanding production.

4.10 A change in a firm's marginal costs may be passed on to consumers as a change in price or output. Such a change is likely to have an immediate effect on the competitive process, including the relative strengths of firms receiving and not receiving subsidies. A change in fixed costs will have no such direct effect on prices. However, this may make entry and/or exit more or less viable for firms, which is generally a long term effect. As indicated previously, a subsidy that enables a firm to buy capital equipment might affect marginal as well as fixed costs.

Recurring payments

4.11 Providing recurring subsidies over a period of time relative to a one-off lump sum is likely to affect firms' entry and exit decisions. Potential entrants could be deterred from entering the market if they have to compete with incumbents that are expected to receive further subsidies. Recurring subsidies could also prevent efficient rationalisation. A firm may remain in a market when this is no longer the best option for it either because it is committed to as part of a subsidy programme or because it has reason to expect subsidies in future that will aid it.

Market characteristics

The extent of market concentration

4.12 This refers to both the number of firms in the market and their size or share of the market. In general, the fewer the firms, the larger their share of the market, and the less competition one would expect to

---

[17] Marginal costs are the additional costs for a firm of an extra unit of production or output.

observe.[18] Market concentration is calculated from simple market and firm level information,[19] once the relevant market has been defined.[20]

4.13 If the affected market is concentrated and the subsidy recipient is a major player then it is more likely that competitors will have to alter their business in response to the subsidy. This may reduce the efficiency of the market. It could also result in the exit of competitors from the particular market which increases the market share of the recipient and could permit anti-competitive behaviour.

The level of product differentiation

4.14 This considers how similar or different the products supplied in the relevant market are. In general, products that are more differentiated (less similar) are less substitutable from consumers' points of view, and so the intensity of price competition and non-price competition in a market of differentiated products may be lower than in a market full of near-identical products.

4.15 If a subsidy is provided in a market with differentiated products, all other things being equal, the effect on competition may be less than providing a subsidy in a market with less differentiated (more similar) products.[21]

---

[18] It is important to note however, that assessing the level of concentration is not always an accurate measure of the level of competition taking place in a market, with some markets having active competition despite there being few firms present.

[19] Many organisations that conduct competition assessments have guidance on accepted ways to calculate and examine the issue of concentration (including the OFT guidance referred to at note 4). Two such methods include calculations of concentration ratios and the Herfindahl-Hirschman Index (HHI).

[20] Section 3 gives an overview of how to define a relevant market.

[21] There is an exception in the situation that there is a very large number of competitors producing identical goods and competing vigorously so excess profits are competed away. If one of these firms received a subsidy they are most likely to keep it as profit as any temporary

Non-price competition

4.16 In many markets, competition does not just take place through cutting prices; it takes place through improving the quality, the style or the functionality of the product. In many markets, firms compete actively on the non-price characteristics of their products.[22] In these markets, it is important to consider whether the subsidy would enable the recipient to improve its quality or brand or other non-price characteristics and gain a competitive advantage over other firms other than through altering prices or output. This is an important characteristic for examining product differentiation and as such these characteristics should be considered together.

Barriers to entry and exit

4.17 Barriers to entry refer to any feature of a market that may give established firms an advantage over potential entrants. If it is hard for a new firm to enter a market it is more likely that established firms can increase prices[23] without the risk of new firms entering the market and undercutting them.

4.18 Barriers to entry may take numerous different forms, including:

- absolute advantages - for example where regulations, licensing or other concepts are used to limit access to a particular market
- strategic advantages – where incumbent firms have advantages over new entrants due to their established position, or their threatened response to entry

---

improvement in market position would be competed away. In this situation there would be no market distortion.

[22] Such markets are likely to be those where there is some degree of product differentiation.

[23] Increased prices are used here as an indication of market power of the firm. In practice there are several different indicators, though price is the main one.

- large levels of sunk costs – the costs of entering a market are more likely to be deter entry where a significant proportion of those costs are sunk, that is, the costs cannot be recovered if the entrant fails and is forced to exit

- economies of scale – these will arise where average costs fall as the level of output rises. In some circumstances, such scale economies can act as a barrier to entry, particularly where the fixed costs are sunk.

4.19 The way in which subsidies are used may exacerbate existing entry barriers, making the market less competitive as incumbents obtain greater protection from potential competitors.

4.20 The presence of entry barriers in an industry increases the risk of a subsidy leading to inefficiency. As indicated before, subsidies can allow inefficient businesses to continue without addressing their inefficiency. If new competitors cannot enter to compete away this inefficiency it will last longer, at the expense of consumers.

4.21 However, it should be noted that in some situations, subsidies can be provided specifically to overcome the barriers outlined above, and allow new firms to enter a market.

Effects on input markets

4.22 Subsidies to a firm may also affect the markets for its inputs such as land, labour and materials. If a firm is a major user of any particular input then a subsidy that prompts a firm to buy more inputs may have the effect of pushing up prices in the input market. This will be the case if the subsidy enables a firm to expand. Also, if some inputs are supplied by local markets (many people without specialist skills offer their labour in regional markets) and the subsidy alters the location of the firm, prices may rise in the local markets in the firm's new location. Price rises in input markets affect competitors who experience rising costs which may reduce their ability to compete.[24]

4.23 The risk of price rises in input markets is low if there is excess capacity in the input markets. For example, there may be unused land or unemployment.[25] The risk is also low if there are low barriers to entry/expansion in the input markets so supply can easily respond to price increases.[26] Conversely, if input markets are operating near capacity and expansion is difficult then prices will rise in input markets and these will put pressure on the subsidy recipient's competitors.

Drawing conclusions from the detailed analysis

4.24 Competition assessment is one element of the appraisal of subsidies. The results of the analysis based on this guidance sit alongside the estimation of all other costs and benefits, as required by the Green Book.

4.25 Combining the results from a competition assessment into a full cost-benefit analysis may lead to the following conclusions:

- the subsidy is unlikely to give rise to distortions to competition, in which case competition effects have no influence on the decision to proceed

- the subsidy is likely to give rise to distortions to competition but can be redesigned to reduce these. In this case, the redesigned subsidy

---

[24] Conversely prices may fall in the location that the firm leaves as the demand for inputs falls.

[25] The subsidy may still push up wages even if there are unemployed people in an area. The people currently unemployed might not be suitable for the new jobs offered and so wages might rise attracting people employed in other businesses in the area or from outside the area.

[26] However, the input market might also fail to respond to the increase in demand if firms think that the subsidy recipient is inefficient and will go out of business in the future despite the current support. In such circumstances firms producing inputs will not risk the investment required to expand.

would proceed if it was likely to generate net benefits based on the cost-benefit analysis

- the subsidy is likely to give rise to distortions to competition that cannot be reduced further. However, when all costs and benefits arising from the subsidy are taken into account, the subsidy is expected to generate a net benefit. This subsidy would proceed

- the subsidy is likely to give rise to distortions to competition such that the total cost of the subsidy outweighs the benefits. Under these circumstances the subsidy award should not go ahead.

Example of assessment

(Continuing the example from page 12) First the no-subsidy scenario must be considered. Caspiar indicates in its grant application that without the grant it will locate in north west France. The scale of production would be 10 per cent larger in the UK than in north west France.

In order to assess the value for money of the grant subsidy providers will check the credibility of the no-subsidy scenario.

- If they agree with the information presented then this scenario is used for comparison.
- If they are not convinced by the figures, for example, if they think that the plant can more profitably locate in the UK than in north west France even with no grant or a smaller grant, then they will re-estimate the figures. This result in the value for money test reduces the likelihood that the grant will be approved on value for money grounds.

The subsidy providers confirm the recipient's figures, that the discounted net present value of production in France is £1m greater than in the UK. This estimate assumes no change in competition in the market between the subsidised and unsubsidised scenario (as is likely to be the case with figures provided by the company).

The next step is to consider the other characteristics of the subsidy and the market to assess whether, relative to the counter factual, a significant competition effect is likely to arise.

Subsidy size	£1m	Market size	£2,300m
		Total investment	£15m
		Firm turnover in market	£122m
		Time span	Disbursements over 5 years. Investment returns to accrue

			over 12 years.
		Additional capacity relative to no-subsidy scenario.	Sales of produce from the new plant are expected to increase revenue by £3m per year compared to £2.75m in France.
Target	The constraint on the use of the subsidy is that it brings a specified level of investment and employment to the region. In order to achieve this it could be used in the most advantageous way for the recipient. Caspiar is not requiring the subsidy to restructure or stay in business.		
Repetition	The recipient has received subsidies in the past for establishing the existing plant and safeguarding employment in it.		
Concentration and symmetry	According to market research the market has a clear leader which has 45 per cent market share, another company has 12 per cent and Caspiar is the largest of a group of 4 that all have around 5 per cent. The remainder of the market is split between niche products and supermarket own-brands.		
Product differentiation	There is a high degree of product differentiation in this market though most major product types are made by the main manufacturers.		
Basis of competition	The main players in the industry compete principally on price but also, on other characteristics such as innovative flavours and nutrition. Development of variations in the product and similar price movements in an industry where collusion is a low risk suggest that the main players all respond to each others' competitive actions. All firms, but especially the market leader, invest heavily in advertising. In such an industry we would expect most rivals to respond to Caspiar's new plant, provided it is significant enough.		
Entry barriers	Branding and advertising are important in the snack foods industry. Caspiar's advertising expenditure, which is typical for the industry, is significant. These costs cannot be recovered if		

	a company enters the market and then fails; hence they act as a barrier to entry. However, there has been entry in the last few years by foreign manufacturers with the financial strength to promote their product. A number of these entrants have remained in the market though are among the smaller players.
Related markets	The subsidy influences the location of the expansion as well as its scale. The location choice could affect the market for land, employment and materials. Based on paras 4.2 we conclude that the location decision increases demand for land in the region but not in a way that has a significant effect. The objective of the grant is to raise employment. This distortion is the objective of the subsidy, though any effects on other local employers through raising local wages must be considered in the value for money assessment of the subsidy as this could offset in part the growth in employment expected from the subsidy. Most input materials are in a Europe-wide market so the increase in demand for these affects their market in the same way regardless of location in France or the UK. Capacity constraints in input markets could raise the price of inputs to all those that use the inputs and could lead to further disadvantages to competitors. In its business case Caspiar addressed this issue and explained that if the expansion in the UK went ahead suppliers would be made aware of the increased demand. With low barriers to entry and expansion in the supply markets the subsidy would not result in higher prices in these markets. The effect of the subsidy on location will not affect downstream markets as these will receive wholesale snacks regardless.

Conclusions

Examining the likelihood of different types of detriment occurring:

1. The subsidy changes the market so that there is a greater risk of abusive behaviour.

    a. The recipient increases its market share to a level at which it has power to behave independently of competitive pressures, allowing it to raise its prices profitably – **Unlikely. Subsidy recipient unlikely to achieve position of market power from subsidy offered.**

   b. There is consolidation amongst competitors to an extent that reduces competition or increases the risk of collusion – **Unlikely. Investment not large enough relative to market to cause major restructuring.**

   c. Entry barriers are raised that insulate the firms in the industry from competitive pressure - **Some effect likely. Repetition of subsidies in this market must deter entry without subsidy. This subsidy would re-enforce this but effect may not be large relative to non-subsidy entry barriers.**

2. The subsidy undermines the mechanisms for ensuring efficiency in the market to an extent that,

   a. Competitors are forced to exit the market or reduce their long-term investment in order to ensure their short-term survival – **Some effect likely. Although recipient is not biggest player in the market subsidy will increase its position relative to similar-sized competitors and may push these firms to apply different strategies such as focusing on select product lines rather than trying to compete on everything. This could be detrimental to competition amongst the fringe firms.**

   b. The subsidy recipient is under less financial pressure to be competitive, with the result that its underlying costs are rising relative to firms with similar inputs - **Some effect likely. The competitiveness of the market will reduce this but the subsidy reduces some of the pressure on Caspiar.**

   c. An inefficient recipient is able to remain in the market –**Unlikely. Caspiar not losing market share rapidly.**

   d. It is worthwhile for market participants to spend significant sums of money seeking out subsidies – **Some effect likely given the previous subsidies in the industry.**

The proposed subsidy is likely to reduce the efficiency of the market to a small degree. The risk of anti-competitive activity in the market will not increase by a significant amount. Hence, if the subsidy is expected to give rise to benefits that are well in excess of its costs, it should go ahead as proposed. If, however, other costs and benefits are finely balanced then the design and award should be reconsidered.

Advice on competition assessment

4.26 Responsibility for the assessment of competition lies with the government department or agency that is responsible for the introduction or renewal of the subsidy. Technical advice is available from competitionassessment@oft.gsi.gov.uk.