OFFICE OF FAIR TRADING

Empirical indicators for market investigations

Part 2: main report

September 2004

OFT749c

CONTENTS

1 CONSUMER COMPLAINTS

Introduction

1.1 If consumers are dissatisfied with the purchase of a particular good or service, they are likely to make a complaint. In the first instance, the consumer is likely to take their complaint to the supplier in question. If this is insufficient to resolve the matter, then they are likely to make a complaint to one of the many organisations with the mandate to handle consumer complaints.

1.2 Consumers may complain for a range of reasons. They may complain about goods that they perceive to be defective or services they perceive to be substandard, non-delivery of products or non-completion of services, advertising claims that they perceive to be false or misleading, and pricing or safety concerns.

1.3 The fact that consumers are prompted to make such complaints signals that a market may not be working effectively. The supplier in question may have a degree of market power or there may be an informational asymmetry. Accordingly, the volumes of consumer complaints attributable to individual sectors is a useful indicator for the market screening exercise.

Consumer complaint information sources

1.4 In this section we detail the information sources relating to consumer complaints that we have identified as part of our research.[1] We detail all the information sources we have identified, including those we

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[1] In order to identify potentially relevant information sources, we have systematically searched each organisation listed on the 'links' page on the Trading Standards Institute website, the National Consumer Federation website, and on the consumer web-portal ConsumerComplaints.org.uk. We have also conducted general Internet searches using the google search engine, and key words with the objective of identifying consumer organisations, consumer and product surveys, and other consumer-related publications.

consider less relevant for the current market screening exercise.[2] In all cases, we discuss both the advantages and potential limitations of the information source with respect to the market screening exercise. We also draw out evidence from each of the information sources in order to identify the 'most frequently complained about sectors'.

1.5 We begin the section with an overview of the bodies responsible for investigating individual consumer complaints in the UK, and the criteria we have adopted to identify the data sources most relevant for the market screening exercise.

Introduction

1.6 Reports suggest that consumers make between eight and eleven million complaints each year in the UK.[3] The primary government entities currently charged with the responsibility for consumer complaints in the UK are the trading standards departments. There are some 200 individual trading standards departments throughout the UK, which advise on consumer problems. The departments have powers to investigate complaints about false or misleading descriptions or prices, inaccurate weights and measures, consumer credit and (except in Northern Ireland) the safety of consumer goods.[4]

1.7 A number of sector-specific consumer bodies and regulators are also responsible for individual complaint handling in the UK, such as Ofcom, Energywatch, WaterVoice, and Postwatch. These entities hold varying powers with respect to consumer complaints.[5] The Department of

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[2] We include these for completeness. As explained later in this section, these sources may also become useful for the market screening exercise, if the information sources are updated or reformatted.

[3] The eight million estimate is quoted within the paper: OFT, draft internal memo on consumer complaints, undated. The eleven million estimate is quoted at the consumer website: http://www.howtocomplain.com/about/IntroductionAndFAQs.shtml#_introduction

[4] Source: OFT website, http://www.oft.gov.uk/Consumer/Where+to+Go+for+Help/default.htm#general

[5] Most of these entities hold investigatory and/or enforcement powers, although some may simply offer assistance to consumers in relation to individual complaints.

Trade and Industry ('DTI'),[6] the OFT and the National Consumer Council ('NCC'),[7] despite playing a significant role in the development of consumer policy, do not have statutory powers to investigate or act on individual consumer complaints.[8]

1.8 One other government initiative is Consumer Direct. This service is due to be launched from the summer of 2004. Funded by the DTI, the initiative will provide consumers with a national helpline and online service whereby they can obtain advice on a range of consumer matters, including advice before shopping, information on consumer rights and guidance concerning individual problems. Where further assistance is required (e.g. if the consumer requires specialist advice or intervention), Consumer Direct will refer consumers to another entity.[9]

1.9 With respect to non-government organisations, a number of trade or industry associations offer services relating to individual consumer complaints. These associations often maintain an industry code of practice for their members and provide arbitration or conciliation services for dissatisfied customers. Examples include the Advertising Standards Authority, and the Association Of British Travel Agents. Other non-government organisations include formal consumer organisations (such as the Citizens Advice Bureaux, the Consumers' Association, and the National Consumer Federation), and also other consumer advocates, such as the BBC Watchdog and a number of privately maintained, consumer complaint websites such as howtocomplain.com, complaindomain.com, and grumbletext.co.uk.

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[6] The DTI has overall responsibility for competition and consumer policy in the UK.

[7] Affiliated with the Scottish Consumer Council and the Welsh Consumer Council.

[8] While some consumers may choose to telephone or write to these entities detailing their complaint, none of the entities have the power to conduct formal investigations of individual consumer complaints. Nevertheless, the entity may offer advice or refer the matter to another entity. Note that the OFT does have the power to investigate individual complaints relating to alleged breaches of the Competition Act; including those made by consumers. However, these complaints are quite different in nature to the complaints considered in this chapter, and we do not consider these further here.

[9] Source: DTI website, http://www.dti.gov.uk/ccp/cdinfo/background.htm

1.10 Each of the following sections provides an outline of the information sources we have identified and recommend for the market screening exercise. The selection criteria we have adopted are that:

- the information is UK based
- the information utilises a sample size of more than 50 consumer complaints per annum
- the information relates to relatively recent complaints (i.e. includes complaint data for at least the year 2003)
- the information includes a breakdown of complaints according to clearly defined sector categories (or alternatively the data sample is sufficiently small to enable an analyst to collate the data accordingly).

1.11 The information sources on which we focus are:

- the trading standards departments
- the sector specific consumer bodies or trade associations
- the BBC's *Watchdog*
- a number of privately maintained, consumer complaint websites
- the Advertising Standards Authority
- the Independent Television Commission.

1.12 In addition to the more detailed reviews of each information source, in Section 1.150, we provide a summary of the information sources and outline our conclusions relating to the most commonly complained about sectors. In Section 1.158, we also detail a number of sources that we have not utilised for the purposes of the market screening exercise, but which may become useful in future. Section 1.206 provides a list of the consumer organisations or sources we have investigated as part of our research.

Complaints to trading standards departments

Introduction and overview

1.13 By far the most comprehensive source of data concerning consumer complaints relates to complaints received by the trading standards departments. Trading standards departments receive some 850,000 complaints each year. Complaint data are collated by the departments each quarter, and forwarded to the OFT. The OFT then aggregates and presents the data in its *Trends* publication.[10]

1.14 *Trends* records complaints as received by trading standards departments[11] from individuals, households, or traders acting on behalf of consumers.[12] Complaints are defined to be 'contacts' from these parties, acting as a consumer:

> '... in which the consumer, rightly or wrongly considers that the goods, services or property are faulty or wrongly described; by which the goods, services or property are subject to conditions imposed by the supplier which appear to the consumer to be unreasonable; or in which the supplier has adopted an attitude or engaged in a trading practice, which the consumer regards as detrimental to his/her interests.'[13]

1.15 The publication explicitly excludes complaints made by or on behalf of businesses, charities or other organisations; information enquiries

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[10] Issues of *Trends* are available at: http://www.oft.gov.uk/news/statistics/trends.htm

[11] Each trading standards department reports quarterly to the OFT on consumer complaints. The OFT then compiles the statistics and produces *Trends*. In any one quarter, a small proportion of departments may not complete their report to the OFT. As such, *Trends* may not capture all of the complaints made by consumers to trading standards departments.

[12] The figures recorded reflect only those complaints brought to the attention of trading standards and environmental health departments and environmental health offices that are reported to OFT. The figures recorded exclude complaints received by sector specific regulators/consumer bodies (e.g. Ofcom, Energywatch, and WaterVoice), industry associations, and other consumer representative bodies (e.g. National Consumer Council).

[13] OFT, *Classification of consumer complaints*, effective April 1999, p21.

(where no action other than redirection of the enquiry was required); pre-shopping advice; enquiries in relation to goods and service in general; and follow-up calls with regard to a previously recorded complaint. As such, the publication will tend to include substantive complaints made by consumers, but may still include some unfounded or trivial complaints.

1.16 Complaints in the publication are grouped by the type of goods/service and by trading practice. The publication adopts 71 categories for goods/services, and 8 trading practice categories, including 'defective goods or substandard service', 'non-delivery of goods and delay or non-completion of services', and 'selling techniques'. The categories adopted in the publication are clearly defined in companion documents to the publication. As such, the misallocation of complaints to sector categories is likely to be relatively small.[14]

1.17 *Trends* has been produced quarterly since January 1999.[15] However, the classification system for 'complaints' and the sector categories has only been in place since April 1999. As such, Trends offers a consistent time series of complaint data from April 1999 to September 2003.[16]

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[14] Although we observe that there is likely to be some discrepancy in the allocation of a limited number of complaints. For example, there are no precise rules relating to the allocation of complaints about weight loss and dietary advice/equipment. These may be allocated to categories: 'pharmaceutical products, dental, optical and other medical products', or 'toilet articles, perfumery, hairdressing and beauty care' or 'other personal goods and service'. Similarly, while the classification rules require complaints about online shopping services to be allocated according to the type of goods purchased, in a number of cases we would expect a selection of goods to be purchased by the consumer. These are likely to span a number of sector categories, and as such, uncertainty as to the allocation of the complaint will arise.

[15] The oldest back issue of *Trends* on the OFT website relates to January 1999.

[16] Note that the most recent issue of *Trends* relates to the period April to June 2003. However, we have received a spreadsheet of complaint data relating to the period July 1999 to September 2003 from the OFT. We have utilised this spreadsheet for the purposes of preparing this chapter.

1.18 Whilst there are a number of significant advantages of the data contained in *Trends*, there are also a number of limitations. We have identified six key limitations.

1.19 First, and perhaps the most significant limitation of the complaint data is that it provides no measure of the value lost to the consumer. The data does not detail monetary amounts lost by the consumer, nor does it provide any other indication of the significance of complaints made. As such, the indicator is likely to be rather blunt in terms of prioritising the OFT's workload (which is ultimately the objective of the market screening exercise). This limitation, however, is a phenomenon of all the consumer complaint information sources we have identified.

1.20 Second, on a related point, the proportion of complaints actually upheld by the trading standards departments is not identified within the data.[17] While the definition of complaints adopted by the publication is likely to limit the proportion of minor complaints or enquiries included in *Trends* to some extent, we would still expect a proportion of complaints to reflect relatively minor consumer concerns.[18] This would not be a significant issue if the proportion of minor complaints was spread evenly across all sector categories, but, unfortunately, data is not available to substantiate whether this is likely to be the case. Accordingly, while the data may provide a reasonable indictor of the 'most complained about sector', it may overstate the extent to which a market is working ineffectively.

1.21 Third, the data does not differentiate complaints by geographical region. As such, the data will mask issues that are specific to a particular region of the UK. Again, this is a characteristic of all the data sources we have identified, and cannot be easily rectified.

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[17] *Trends* details the total number of complaints received by the trading standards departments, and does not detail outcomes or findings of investigations.

[18] For example, the Advertising Standards Authority reports that almost 60 percent of complaints received in 2003 were either not upheld, withdrawn, unjustified or there was 'no case to answer'. Source: percentage calculation based on data in *ASA Summary Report*, Volume 3, Issues 1-4, 2003 and 2004.

1.22 Fourth, it is not clear whether complaints made to the trading standards departments are generally representative of all complaints made by consumers. While complaints received by trading standards departments may represent a significant proportion of complaints in terms of volume, it need not represent the types of complaints generally made by consumers. There are two reasons why the data may not be generally representative of all consumer complaints made. First, a significant proportion of consumers might be reluctant to take their concerns to government authorities (perhaps preferring less formal avenues such as complaint websites). It is not obvious, however, that this would introduce a significant sectoral bias in the data (which is the bias of most interest to the market screening exercise). Second, a significant proportion of consumers may choose to take their complaints to other government departments (such as the sectoral consumer bodies/regulators) or trade associations rather than the trading standards departments. This would introduce a degree of sector bias in the data. Accordingly, it will be important to view the *Trends* data in the context of other information sources. In particular, Section 1.31 contains our analysis of the complaints received by sector specific consumer bodies, in an effort to address this sectoral bias.

1.23 Fifth, the sector classification scheme adopted by *Trends,* whilst in general clearly defined, incorporates a number of very broad sector categories. For example, the category 'other personal goods and services' includes a wide range of goods and services, from stationary goods to handbags and suitcases to introduction agencies. Similarly 'other professional services' includes the services offered by recruitment agencies, architects, legal advisers and undertakers. The implication is that, to the extent that these categories feature relatively high volumes of complaints, they will provide a blunt indicator for the purposes of prioritising the OFT's workload.

1.24 Lastly, *Trends* does not cover very recent complaints by consumers. As noted, *Trends* currently only covers complaint data to September 2003. As such, the data source may not be the best indicator of current consumer concerns, and it will be important to view the data in the context of other information sources. Sections 1.78 and 1.88 discusses our analysis of information sources containing very recent complaint data in an effort to address this potential limitation.

Approach for the purposes of the market screening exercise

1.25 In terms of using the data for the purposes of a market screening exercise, the data lends itself to the following types of analysis:

- a ranking of sectors according to the number of complaints received, by individual year and in total, and/or
- an analysis of complaints received about individual sectors over time (an increase in the number of complaints relative to past years may indicate an emerging market or informational problem in the sector).

1.26 Analysing the data however shows that the complaints are relatively stable over time, implying that there is little to be gained from analysing trends in the data. The key exception is the sector category 'other professional services', as discussed below.

1.27 Ranking the sectors according to the complaints received for each individual year, or by the total number of complaints received between July 1999 and September 2003 makes little difference to the overall ranking results. The top 5, top 10, and top 20 sectors remain stable over time, albeit with marginal changes in the ranking order within these lists (e.g. sector A may rank at 8 in 2002, and then 10 in 2003). The key exception is the category 'other professional services', which is currently ranked as the seventh most complained about sector.[19] Over the years between 1999 and 2002, the sector was ranked between 27th and 14th most complained about sector.

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[19] Based on complaint data over the period October 2002 to September 2003.

1.28 Given that the data is relatively stable over time, taking a simple rank of sector categories according to the number of complaints received over the past four quarters[20] will provide a reliable measure of the complaints received by the trading standards departments. Further, using recent data will identify any change in trends relating a specific sector category (such as 'other professional services'). Table 1.1 provides a list of the top 20 sector categories accounting for the most consumer complaints over the period October 2002 to September 2003.

[20] We would not propose to analyse the rank of sector categories on the basis of complaint data for only one quarter due to the likelihood of seasonality bias.

Table 1.1: Complaints received by Trading Standards Departments October 2002 to September 2003

Rank	Sector	Number of Complaints Received
1	Home maintenance, repairs and improvements	84,685
2	Second-hand motor vehicles	64,268
3	Other personal goods and services	50,297
4	Radio, TV, and audiovisual equipment etc	35,977
5	Large white goods and major fixed appliances	35,313
6	Upholstered furniture	33,465
7	Other professional services	31,336
8	Clothing and clothing fabrics	29,732
9	Personal computers and related hardware	29,727
10	Food and drink	29,697
11	Double glazing products and installation	28,267
12	Mobile phones and services	26,804
13	Motor vehicle repairs and servicing	24,095
14	Betting, competitions, prize draws	21,514
15	Furniture (other than upholstered, nursery or garden), pictures etc	20,360
16	New motor vehicles	20,013
17	Other electrical domestic appliances (not recreational)	17,406
18	Holidays	16,516
19	Other recreational goods and services	11,596
20	Footwear and footwear repair	11,257
	Subtotal	**622,325**
	Total complaints received	**860,626**

Source: NERA analysis adopting data from OFT's Trends.[21]

[21] Spreadsheet data provided to NERA by the OFT.

1.29 The analysis shows that three sector categories attract a significant number of complaints compared to other categories. The category clearly attracting the most complaints is the 'home maintenance, repairs and improvements' category. This category includes services provided by tradesmen, including general maintenance and repairs, the construction of sheds/garages and other house extensions to pre-existing homes, and other home improvements (such as kitchen and bathroom retrofits).

1.30 The next most complained about category is second hand motor vehicles, followed by 'other personal goods and services'. This latter category includes items such as travel goods,[22] leather goods, stationary, genealogy, and marriage and personal introduction agencies.

Complaints received by sector-specific consumer bodies

1.31 A number of consumers who wish to make complaints to an official consumer body are likely to choose to make complaints to sectoral consumer bodies instead of the trading standards departments. As such the *Trends* complaint data will underestimate the complaints made about particular sectors. In order to address this potential sectoral bias, it is possible to augment the *Trends* complaint data to account for the complaints handled by these entities.

1.32 The consumer bodies or industry associations we have investigated for this purpose are:

- Financial Ombudsman Service
- Architects Registration Board
- Estate Agents Ombudsman

[22] No further explanation of this item is provided in the OFT's sector classification manual, however we expect that this item is intended to cover products such as travel bags or suitcases.

- Ofcom/Oftel
- Independent Committee for the Supervision of Standards of Telephone Information Services
- WaterVoice
- Air Transport Users Council
- Association Of British Travel Agents
- Rail Passengers Council
- Energywatch
- Postwatch.

1.33 We have focussed on these entities because the services they offer appear to be well publicised (and they are therefore likely to receive a significant number of complaints by consumers).[23] Each of the organisations also publishes details about the complaints that they receive each year.

1.34 We are aware of a number of other industry associations offering dispute resolution services for association members and their customers. These include the Retail Motor Industry Federation,[24] the Society of Motor Manufactures and Traders,[25] the Domestic Appliance Service Association,[26] Radio, Electrical and Television Retailers' Association,[27] the Internet Service Providers Association,[28] Glass and Glazing Federation,[29] and Qualitas[30]. However, we have been unable to identify

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23 Information about these entities and links to their websites feature prominently on consumer related websites.

24 http://www.rmif.co.uk/WSite.dll/Homepage?PAGENAME=ConsumerComplaints&PID=17&SID=3

25 http://www.smmt.co.uk/home.cfm?CFID=69033&CFTOKEN=49028604

26 http://www.dasa.org.uk/

27 http://www.retra.co.uk/code_complete_con.htm

28 http://www.ispa.org.uk/html/index3.html?frame=http%3A//www.ispa.org.uk/html/media/CISAS.html

29 http://www.ggf.co.uk/about.html

material detailing the number of complaints/cases these entities handle each year. We have therefore not included these entities in our analysis. We note that, as a result, the augmented *Trends* complaint data may still underestimate the complaints made about particular sectors.

Financial Ombudsman service

1.35 The Financial Ombudsman Service was established by the government to help settle individual disputes between consumers and financial firms. The ombudsman handles complaints about a wide range of financial matters, from insurance and mortgages to pensions and investments. The ombudsman however does not assist consumers with financial advice or problems with debt.[31]

1.36 In the year to March 2003, the ombudsman received some 462,000 enquiries from consumers. Of these, over 62,000 were referred to the ombudsman's adjudicators for more detailed dispute resolution work. This compares to an average of 40,000 complaints received by the trading standards departments about financial services each year. The significant number of complaints handled by the Financial Ombudsman Service would suggest that the *Trends* data, when used in isolation, could be misleading in terms of identifying the sectors which are most frequently complained about. It is therefore useful to analyse the complaint data from the Financial Ombudsman Service further.

1.37 The ombudsman prepares a report each year detailing the number of complaints that it has received and investigated.[32] These reports aggregate complaints according to the subject of the complaint (i.e. the

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30 Part of the Furniture Industry Research Association, Qualitas offers dispute resolution services for member companies and consumers. Further information is available at: http://www.fira.co.uk/scripts/runisa_107k.dll?fira:membershome

31 Source: Financial Ombudsman website: http://www.financial-ombudsman.org.uk/about/key-facts.htm

32 These are available at: http://www.financial-ombudsman.org.uk/publications/annual-reviews.htm

nature of the financial service activity, including insurance, mortgages, personal banking and savings accounts, and credit cards). It is therefore possible to aggregate the complaints received according to the OFT's sector classification system used for *Trends*.[33]

1.38 Table 1.2 provides a summary of complaints received and referred for adjudication by the Financial Ombudsman Service in the years to March 2003 and March 2002, collated using the OFT classification system. Note that the complaints analysed are only complaints which have been referred for adjudication. As such, these figures are likely to represent complaints of particular significance to customers. Nevertheless, compared to trading standards department complaint data, these figures are likely to represent an underestimate of complaints received about financial services.[34]

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33 OFT, *Classification of consumer complaints*, effective April 1999.

34 Unfortunately, perfectly comparable data is not available in this regard.

Table 1.2: Complaints Received and Referred for Adjudication by the Financial Ombudsman

Sector	Year to March 2003	Year to March 2002
Mortgages and other secured credit	23,008	18,471
Other financial services (including stockbroking, investment management, futures, accountants)	11,868	4,235
Non-life insurance	9,332	6,493
Pensions	7,233	5,881
Life insurance	5,009	3,647
Personal Banking (excl credit)	3,835	3,313
Hire and credit (unsecured)	1559	876
Extended warranties and guarantees	254	335
Pet products and services (including pet insurance)	72	79
Ancillary credit business	0	0
Credit repair	0	0
Total number of adjudicated cases	**62,170**	**43,330**

Source: NERA analysis of data available in the Financial Ombudsman Services' 2002/03 Annual Report.[35]

1.39 The implications of combining the Financial Ombudsman Service complaint data and the trading standards data would be to raise the relative ranking of the financial services sector categories significantly, compared to other sectors. For example, combining the two sets of data, all else equal, would raise the ranking of 'mortgages and other secured credit' from rank 63 to 12. Similarly, the sector category 'non-life insurance' would shift from rank 22 to 16, and 'other financial

[35] Available at: http://www.financial-ombudsman.org.uk/publications/ar03/ar03-overview.htm

services' would shift from rank 34 to 19.[36] The final results, combining all other sector-specific complaint data is discussed in detail in Section 1.70.

Architects Registration Board

1.40 The Architects Registration Board ('ARB') was established in 1997, as an independent statutory regulator of all UK registered architects. It has a 'dual mandate' to protect the consumer and to safeguard the reputation of architects, and is responsible for providing consumers with a service in cases of complaint.[37]

1.41 The ARB receives about 850 enquiries and complaints each year (including both telephone and written enquiries).[38] The actual number of substantive complaints received by the Board is not reported, however the ARB notes in its most recent annual report that:

> 'With 30,000+ architects on the Register, ARB receives a low number of enquiries and complaints. In 2002, fewer than 3% of those registered were the subject of complaint to ARB. Of these, only 6 cases (0.02%) were referred to the PCC for a formal Hearing. ...'[39]

1.42 This tends to confirm that the ARB receives a relatively limited number of substantive complaints (between 6, and at most, 850 enquiries). This compares to between 20,000 and 30,000 complaints received by the trading standards departments about 'professional services' each year, over the past few years. The ARB complaint numbers, if integrated within the *Trends* complaint data are unlikely to impact on

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[36] This ranking analysis is based on data over the period 1 April 2002 to 31 March 2003. Note that rankings may not equate exactly to the rankings using data over the period to October 2002 to September 2003 (which is data utilised for the purposes of creating Table 1.1).

[37] ARB website, see: http://www.arb.org.uk/about/index.shtml

[38] Source: Architects Registration Board, *Annual Report*, 2003, available at: http://www.arb.org.uk/news/annual-report-2003/enquiries-and-complaints-statistics.shtml

[39] Source: Architects Registration Board, *Annual Report*, 2003, quote available at: http://www.arb.org.uk/news/annual-report-2003/regulation.shtml

the ranking results.[40] As such, we do not recommend further investigation of the data source.

Estate Agents Ombudsman

1.43 The Estate Agents Ombudsman ('EAO') Scheme provides an independent service for dealing with disputes between estate agents, and consumers who are actual or potential buyers or sellers of residential property in the UK. The scheme relates only to estate agents who are members of the ombudsman scheme.[41]

1.44 The ombudsman only receives about 600 complaint cases each year.[42] This compares to between 20,000 and 30,000 complaints received by the trading standards departments about 'professional services' each year, over the past few years. The EAO complaint numbers, if integrated within the *Trends* complaint data are unlikely to impact on the ranking results.[43] As such, we do not recommend further investigation of the data source.

Ofcom/Oftel

1.45 Ofcom is the sector regulator in the UK for the communications sector. It - and prior to Ofcom's establishment in December 2003, Oftel - is also responsible for dealing with consumer complaints concerning the telecommunications sector. It is also responsible for handling complaints concerning advertising or programming content on television and radio. It accepts complaints from both individual consumers as well as companies who operate in these sectors. Ofcom has established a web-based service to facilitate the administration of these complaints.[44]

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40 Even if the entire estimate of 850 enquires was integrated with the *Trend* complaint data, the ranking of the service category 'other professional services' would remain unchanged.

41 Source: Estate Agents Ombudsman website, http://www.oea.co.uk/

42 Estate Agents Ombudsman, *Annual Report*, 2002, available at http://www.oea.co.uk/

43 Integrating the estimate of 600 complaints with the *Trend* complaint data would leave the ranking of the 'other professional services' sector category unchanged.

44 This is available at: http://www.ofcom.org.uk/contact_ofcom/?a=87101

Ofcom does however encourage consumers to take complaints to their suppliers in the first instance, and then an Alternative Dispute Resolution scheme, prior to taking the complaint to Ofcom.[45]

1.46 In this section we consider only complaints relating to the telecommunication sector (including internet service providers). Advertising complaints are considered separately in Section 1.46. Given that Ofcom has only been established for a limited period, it has yet to publish information about the complaints it has handled since inception.[46] We have therefore focussed wholly on data available from Oftel.[47] In future exercises, however, we would expect the OFT to also analyse Ofcom complaint data.

1.47 Over the past few years, Oftel has received between 80,000 and 100,000 enquiries from consumers about telecommunication services each year.[48] This compares to about 40,000 complaints received by the trading standards departments about telecommunications services each year. The level of complaints received by Oftel is therefore likely to impact on the ranking order of sectors if incorporated into the analysis of Trends data. It is therefore useful to analyse the complaint data from Oftel further.

1.48 Table 1.3 provides a summary of the complaints received by Oftel over the period 1 April 2002 to 31 March 2003, by service category. The summary has been created using the half-yearly complaint bulletins prepared by Oftel.

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45 Source: Ofcom website, http://www.ofcom.org.uk/contact_ofcom/tel_issues/?a=87101

46 Other than advertising complaints, which are discussed further in Section 0.

47 Archived Oftel data is available at: http://www.ofcom.org.uk/static/archive/oftel/publications/consumer/comp0603.htm

48 These figures refer to enquiries from new contacts. These contacts appear to relate only to consumer complaints, not general enquiries. Source: http://www.ofcom.org.uk/static/archive/oftel/consumer/advice/Statistics/oftelstats1.htm

Table 1.3: Complaints received by Oftel in the year to March 2003

Sector	Number of Complaints
Fixed line telecommunications	55,465
Mobile telecommunications	34,300
Internet service providers	12,035
Total	**101,800**

Source: Oftel, Consumer complaints made to Oftel – the telecommunications regulator – Issue 6 and 7.[49]

1.49 The implications of combining the Oftel complaint data and the trading standards data would be to raise the relative ranking of the communications services sector categories significantly, compared to other sectors, all else equal. All communications service categories would move into the top 20. For example, combining the two data sets, all else equal, would raise the ranking of 'telecommunications excl mobile' from rank 28 to 3. Similarly, the sector category 'mobile telecommunications' would shift from rank 11 to 4, and 'internet service providers' would shift from rank 49 to 20.[50]

Independent Committee for the Supervision of Standards of Telephone Information Services

1.50 The Independent Committee for the Supervision of Standards of Telephone Information Services ('ICSTIS') is an industry-funded regulatory body for all premium rate charged telecommunications

[49] These publications are available at: http://www.ofcom.org.uk/static/archive/oftel/consumer/advice/Statistics/oftel.htm

[50] This ranking analysis is based on data over the period 1 April 2002 to 31 March 2003. Note that rankings may not equate exactly to the rankings using data over the period 1 October 2002 to 30 September 2003 (which is data utilised for the purposes of creating Table 1.1)

services.[51] The ICSTIS investigates consumer complaints concerning premium rate services, and to this end, it operates a free helpline for consumers. ICSTIS reports that the operators at the helpline handled 107,534 enquiries in 2002, and within the first few months of 2003, the operators were handling 20,000 calls per month (or 240,000 per year).[52]

1.51 Of the total number of enquiries it received in 2002,[53] ICSTIS investigated just over 8,000 complaints. In the context of the Oftel/Ofcom data, we would not expect these estimates, if integrated within the *Trends* complaint data, to impact significantly on the ranking results.[54] We therefore do not recommend further investigation of the ICSTIS data source.

WaterVoice

1.52 WaterVoice is an independent organisation established to represent the interests of consumers in respect of the water industry. While the organisation works closely together with the industry regulator, Ofwat, it is a completely separate entity. WaterVoice operates through nine regional committees in England and a committee for Wales, and has a statutory duty to investigate complaints from customers about water and sewerage companies if they fail to offer the customer a satisfactory response.[55]

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51 Premium rate services offer information and entertainment via phone, fax, PC (e-mail, Internet, bulletin board), mobile or interactive digital TV. Services range from sports, voting and sex lines to competition, chat and business information services.

52 ICSTIS, *Annual Report*, 2002, available at: http://www.icstis.org/icstis2002/pdf/ACTIVITY_2002.PDF

53 Data for the year 2002 is the most recent data available from the ICSTIS.

54 Incorporating the Oftel data would be sufficient to boost the 'mobile' and 'telecommunications excl mobile' categories to the top 5.

55 Source: WaterVoice website: http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/Content/navigation-watervoice-homepage

1.53 Each year, WaterVoice receives about 10,000 complaints about water and sewerage companies.[56] This compares to 1,500 complaints received by the trading standards departments each year. Given that the water sector receives relatively few consumer complaints,[57] incorporating the WaterVoice data into the *Trends* complaints data would have little impact on the outcome of the market screening exercise. Incorporating the WaterVoice data would still leave the water sector well short of the top 20 sectors attracting the most complaints. As such, we do not recommend further investigation of the data source.

Air Transport Users Council

1.54 The Air Transport Users Council ('AUC') is the statutory authority that represents consumers within the aviation industry in the UK. Although independent, the AUC forms part of the Civil Aviation Authority ('CAA')[58] as an auxiliary group. The AUC handles consumer complaints, and it will take consumer complaints to airlines and airport service providers once a consumer has already made a written complaint to an airline or airport. The AUC, however, has no formal investigatory or enforcement powers in relation to consumer complaints.[59] The AUC will not take up complaints in relation to tour operators or travel agents.[60]

1.55 In the year to March 2003, the AUC handled some 1,675 consumer complaints about the aviation industry. These related to complaints

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56 This estimate does not include general enquiries. In addition to the 10,000 complaints received each year, WaterVoice also handles some 30,000 general enquiries. WaterVoice, *Annual Report*, 2002/03, available at: http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/AttachmentsByTitle/wvannrep0203/$FILE/WaterVoice+Annual+Report+2002-03.pdf

57 It ranks at 64th most complained about sector on the basis of *Trends* complaint data over the period October 2002 to September 2003, and over the period April 2002 to March 2003.

58 The CAA is the UK's independent aviation regulator. It is responsible for all civil aviation regulatory functions: economic regulation, airspace policy, safety regulation and consumer protection.

59 It therefore cannot impose obligations or remedies on service providers in response to consumer complaints.

60 Source: AUC website, http://www.caa.co.uk/auc/default.asp

about, for example, mishandled baggage, flight delay and cancellation, and ticketing.[61] This estimate compares to around 3,500 complaints received by the trading standards departments each year.

1.56 Given that the airline/aviation sector receives relatively few consumer complaints,[62] incorporating the AUC data into the *Trends* complaints data would have little impact on the outcome of the market screening exercise. Incorporating the AUC complaint data would not significantly impact on the ranking results, leaving the sector category well short of the 'top 20' list.[63] As such, we do not recommend further investigation of the data source.

Association of British Travel Agents

1.57 The Association of British Travel Agents ('ABTA') is the primary trade association for tour operators and travel agents in the UK. It maintains an industry code of conduct, and will provide assistance to consumers with complaints about companies that carry the ABTA logo.[64] In response to consumer complaints, ABTA will investigate possible breaches of the industry code, and may arrange arbitration, if required, to resolve disputes.[65]

1.58 ABTA deals with about 17,000 complaints each year. Of these, about 1,000 are taken to ABTA's arbitration scheme.[66] These figures do not include general enquiries; in addition to the complaints received, ABTA receives some additional 70,000 or 80,000 general enquiries each

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61 AUC, *Annual Report*, 2002/03, available at: http://www.caa.co.uk/docs/306/85930annualreport.pdf

62 The sector 'road, rail, air & sea travel exc. car hire' ranks at 52nd most complained about sector on the basis of *Trends* complaint data over the period April 2002 to March 2003.

63 Incorporating the data would raise the sector to the 41st most complained about sector, all else equal.

64 ABTA estimates that its members are responsible for the sale of about 80 percent of all UK-sold holidays. Source: ABTA website: http://www.abta.com/2002/about.html

65 Source: ABTA website, http://www.abta.com/

66 Source: ABTA website, http://www.abtamembers.org/press/kit/facts.htm

year.[67] This compares to a little under 25,000 complaints received by the trading standards departments each year. Incorporating the complaints received by ABTA into the *Trends* complaints data would significantly impact on the sector ranking, and therefore the information warrants closer investigation.

1.59 In its annual report ABTA reports the total number of complaints that it receives each year. It does not, however, disaggregate the number of complaints by goods/service category. Given that ABTA receives complaints about both travel agents and package holidays, incorporating the ABTA and *Trends* complaint data, the *Trends* sector categories 'travel agents' and 'holidays' would need to be aggregated.

1.60 In the year to June 2003, ABTA received a total of 16,258 complaints.[68] Incorporating this figure into the *Trends* data, and aggregating the sector categories 'travel agents' and 'holidays', implies that the sector is the 4th most complained about sector, all else equal.[69,70]

Rail Passenger Committees and the Rail Passengers Council

1.61 Rail Passengers Committees ('RPCs') are regional bodies responsible for representing rail passenger interests, and for mediating complaints that passengers and train companies cannot settle. There is one Rail

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[67] Source, ABTA, *Annual Report*, 2002/03, available at http://www.abtamembers.org/annualreport/

[68] Source, ABTA, *Annual Report*, 2002/03, available at http://www.abtamembers.org/annualreport/

[69] Previously, the sector category 'holiday' was ranked at 17 and 'travel agents' were ranked at 54 (on the basis of data over the period April 2002 to March 2003).

[70] For analysis purposes, we have utilised *Trends* data for the period April 2002 to March 2003. We have done this to maintain consistency with other sector specific data sources (such as the Financial Ombudsman and Oftel data). This implies that there is a slight inconsistency between the time periods for the *Trends* data relative to the ABTA data (as ABTA relates to the period July 2002 to June 2003). However, no difference in the ranking of the 'holiday and travel agent' sector category would result if a consistent time period were adopted (i.e. July 2002 to June 2003).

Passengers Committee for each of six English regions, one for Wales and for Scotland. One of the roles of the London Transport Users Committee ('LTUC') is to act as the Rail Passengers Committee for London. The work of the Committees is co-ordinated by the Rail Passengers Council ('RPC').[71]

1.62 The RPC reports that in the year to March 2003, the RPCs and the LTUC received 6,616 'appeal' complaints concerning passenger train services. Appeal complaints are those complaints referred to an RPC because passengers were dissatisfied with the outcome after taking it to the train company.[72]

1.63 Incorporating the 6,610 complaint estimate into the *Trends* data, would raise the rank of the sector category 'road, rail, air and sea travel exc. car hire' from 52nd place to 24th place, all else equal. As such, it has little impact on the outcome of the market screening exercise, leaving the sector category short of the 'top 20' list. We do not recommend further investigation of the data source.

Energywatch

1.64 Energywatch is an independent statutory authority established to represent consumers in the gas and electricity industry. Although it works closely with the gas and electricity regulator, Ofgem, Energywatch is a completely separate entity, established to focus solely on consumer issues. One of Energywatch's roles is to assist consumers if they have a complaint about an energy company. Energywatch has a statutory duty to investigate and seek to resolve consumer complaints against companies about regulated matters, and is also required to publish information about complaints made against energy suppliers,

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71 http://www.railpassengers.org.uk/Council

72 Rail Passengers Council, *Annual Report 2002-2003*, available from http://www.railpassengers.org.uk/Council

transporters, distributors (or their agents) both directly to Energywatch and also to the relevant licensee.[73]

1.65 Energywatch reports that in the year to March 2003, it received 109,270 complaints about electricity and gas companies. This estimate does not include general telephone enquiries, of which Energywatch handled over a million in the year to March 2003. Of the complaints received, Energywatch reports that 31 percent of complaints were directed at the gas sector, while 56 percent were directed specifically at the electricity sector. A further 13 percent were directed at 'duel fuels'.[74]

1.66 Incorporating the complaints handled by Energywatch into the *Trends* data would impact significantly on the ranking of sectors. Putting aside the complaints directed at duel fuels (of which there were only 14,205 in the year to March 2003),[75] incorporation of the Energywatch data would change the rank of the sector category 'gas' from to 26 to 5, and the rank of the category 'electricity' from 38 to 2, all else equal.[76]

Postwatch

1.67 Postwatch is an independent authority, and was established in 2001 to represent consumers in the postal sector. It is responsible for

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73 Source: Energywatch website, http://www.Energywatch.org.uk/about_Energywatch/index.asp

74 Energywatch, *Annual Report*, 2002/03, available at http://128.86.245.190/uploads/Annual_Report_200203.pdf

75 An alternative would be to combine the sector categories 'electricity' and 'gas' and to incorporate all of the complaints received by Energywatch into the new category. This would result in the combined category becoming the most complained about sector category, irrespective of whether other sector specific data were also incorporated into the analysis or not. For the purposes of retaining granularity to the results however, we have chosen not to aggregate the sector categories. We recognise that this does underestimate the complaints attributable to the energy sector somewhat.

76 This ranking analysis is based on data over the period 1 April 2002 to 31 March 2003. Note that rankings may not equate exactly to the rankings using data over the period to October 2002 to September 2003 (which is the data utilised for the purposes of creating Table 1.1).

monitoring the levels of service provided by post offices, Parcelforce, Royal Mail and other postal providers, and it can refer any license breaches to the industry regulator Postcomm. All consumer complaints about postal services are channelled through Postwatch.

1.68 In the year to March 2003, Postwatch received 18,273 complaints.[77] This estimate includes only customer complaints, and does not include general enquiries.

1.69 Incorporating the complaints handled by Postwatch into the *Trends* data would impact significantly on the ranking of sectors. Including the data would change the rank of the category 'postal services' from 66 to 15, all else equal.[78]

Summary and conclusions

1.70 Sector specific consumer bodies receive a significant number of complaints. The consumer bodies we have reviewed received just over 300,000 complaints in the year to March 2003. This compares to about 840,000 complaints received by the trading standards departments. Table 1.4 provides a summary of the complaints received by each of the sector specific consumer bodies covered in this section.

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77 Postwatch, Annual Report, 2002/03, available at: http://www.postwatch.co.uk/pdf/policydocs/Annualreport03.pdf

78 This ranking analysis is based on data over the period 1 April 2002 to 31 March 2003.

Table1.4: Complaints received by sector specific consumer bodies April 2002 to March 2003

Consumer Bodies	Number of Complaints Received	Recommendation on whether to integrate data with *Trends* data
Financial Ombudsman Service	62,170	To include in the analysis
Architects Registration Board	850(1)	Do not include
Estate Agents Ombudsman	600(2)	Do not include
Oftel/Ofcom	101,800	To include in the analysis
ICSTIS	8,000	Do not include
WaterVoice	10,000(2)	Do not include
Air Transport Users Council	1,675	Do not include
Association of British Travel Agents	16,258(3)	To include in the analysis
RPC/RPCs	6,616	Do not include
Energywatch	109,270	To include in the analysis
Postwatch	18,273	To include in the analysis
Subtotal	**328,896**	
Total complaints received by trading standards departments	837,685	

Source: Summary data drawn from Sections 1.35 and 1.67.

Notes: (1) A precise estimate of complaints received is not available. The estimate of 850 relates to general enquiries received by the ARB; (2) These estimates are approximates; (3) Data relates to the period July 2002 to June 2003.

1.71 By integrating the data from the sector specific consumer bodies together with the *Trends* complaint data, it is possible to reduce the potential sectoral bias contained in the *Trends* complaints data. Using the combined data set, and taking a simple rank of sector categories according to number of complaints received over the year to March 2003, provides a useful indicator of the most complained about sectors.

1.72 Table 1.1 provides a list of the top 20 sector categories accounting for the most consumer complaints over the period Apr 2002 to Mar 2003.

Table 1.5: Consumer complaints received by Trading Standards Departments, Financial Ombudsman, Oftel, ABTA, Energywatch, Postwatch - April 2002 to March 2003

Sector	Number of Complaints	Rank	
		(Incl Sectoral Data)	(Excl Sectoral Data)
Home maintenance, repairs and improvements	81,364	1	1
Electricity	66,830	2	38
Second-hand motor vehicles	63,678	3	2
Telecommunications exc. mobile phones	63,307	4	28
Mobile phones and services	59,346	5	11
Other personal goods and services	48,942	6	3
Gas	41,952	7	26
Holidays/Travel agents	36,581	8	17[79]
Radio, TV, and audiovisual equipment etc	34,909	9	4
Large white goods and major fixed appliances	34,086	10	5
Upholstered furniture	33,873	11	6
Personal computers and related hardware	31,289	12	7
Clothing and clothing fabrics	30,024	13	8
Food and drink	28,655	14	9
Double glazing products and installation	27,485	15	10
Mortgages and other secured credit	24,896	16	63
Motor vehicle repairs and servicing	24,160	17	12
Other professional services	22,932	18	13
Furniture (other than upholstered, nursery or garden), pictures etc	20,303	19	14
Non life insurance	19,811	20	22

Source: NERA analysis

[79] The sector category ‘holidays’ previously ranked 17th. The sector category ‘travel agents’ previously ranked 54th.

1.73 The list of top 20 sectors is significantly different as a result of including the data from the sector specific consumer bodies.

1.74 The only two sector categories retaining their position within the top 5 are the categories 'home maintenance, repairs, and improvements' and 'second hand motor vehicles'. The category 'home maintenance, repairs, and improvements' in particular retains its clear lead over other sector categories, irrespective of whether the sector specific data is included or not. Notably, the category 'other personal goods and services' has slipped from a ranking of 3rd to 6th.

1.75 The sector categories making an appearance within the top 20 for the first time are the categories 'electricity', 'telecommunications excl mobile phones', 'gas', 'holidays/travel agents', and 'mortgages and secured credit'. These categories all now fall within the top 10 most complained about sectors, with the exception of 'mortgages and secured credit' which ranks at 16th.

1.76 The sector categories dropping from the top 20 list[80] as a result of including the sector specific data are 'betting, competitions, prize draws', 'new motor vehicles', 'other electrical domestic appliances (not recreational)', 'other recreational goods and services' and 'footwear and footwear repair'.

1.77 This list is compared to the sector lists created using other sources of information in Section 1.150.

Complaints investigated by BBC Watchdog

1.78 One of the limitations of the *Trends* complaint data is that it does not cover very recent records of consumer complaints since the most recent data is for September 2003 (although historically, the ranking of sectors

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[80] That is, from the list compiled using data over the period April 2002 to March 2003. Note that this list does not exactly correspond to the top 20 list given in Table 1.1, which is constructed using data over the period October 2002 to September 2003.

have been relatively stable). As noted in Section 1.13, it is therefore important to view the *Trends* data in the context of other, more up to date information sources. The BBC is one such source of data.

1.79 Consumers or consumer advocates may send complaints to the BBC's 'Watchdog'. Each week, on the basis of these complaints, Watchdog chooses one or two key complaints for further investigation. These investigations are the subject of a weekly brief, which feature on the BBC's website.

1.80 The website contains a summary of each case investigated by BBC Watchdog, including the company against which the complaint(s) have been made, the basis of the complaint, and often the complainant(s).[81] At the time of writing,[82] there were some 67 complaint cases posted on the website. All cases posted on the website are relatively recent; none of the cases featured on the website date back further than September 2003 and the most recent case is dated 30 March 2004.[83]

1.81 The BBC Watchdog case list is that it offers few data points. The BBC Watchdog reports less than 100 complaint cases on its website, and it is therefore particularly difficult to ascertain whether these cases are representative of all complaints made by consumers.

1.82 A further consideration however is that the case list posted on the website represents only a sample of complaints actually received by BBC Watchdog. The BBC Watchdog may not act on all the complaints that it receives. Although, the BBC Watchdog does not report the criteria it uses to select the complaints for investigation, the criteria is likely to be some combination of: (1) the validity of the complaint; (2) the extent to which the complaint is representative of other complaints received; and (3) the severity of loss to the customer. The fact that some groundless or trivial complaints have already been filtered, and

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81 Reports are available at: http://www.bbc.co.uk/watchdog/reports/index.shtml

82 31 March 2004.

83 Note that the BBC Watchdog website appears to be updated regularly. This involves the relatively older stories being removed regularly.

that they are likely to be representative, to some extent, improves the usefulness of this source.

1.83 Table 1.6 collates, by sector, the cases posted on the BBC Watchdog website.[84] The classification system adopted by the OFT for the *Trends* publication has been used for collation purposes.[85] The table only reports the top 8 sectors, dropping those sectors within which two or less BBC Watchdog investigations took place.

Table 1.6: Investigations of consumer complaints by the BBC Watchdog - September 2003 to March 2004

Sector	**Number of Investigations**	**Overall Rank**
Non-life insurance	6	1
New motor vehicles	6	1
Other professional services (e.g. employment and recruitment agencies, advertising)	6	1
Home maintenance, repairs and improvements	4	2
Entertainment, catering and accommodation	4	2
Holidays	4	2
Toilet articles, perfumery, hairdressing, and beauty care	3	3
Lettings agencies and management	3	3
Subtotal	**36**	
Total investigations posted on website	**67**[86]	

Source: NERA analysis using case information on the BBC Watchdog website as at 31 March 2003[87]

84 Those posted at the time of writing, 31 March 2004. Note that we have excluded complaints relating to government services (such as the NHS, etc).

85 OFT, Classification of consumer complaints, effective April 1999.

86 Note: excludes complaints directed at government agencies.

87 http://www.bbc.co.uk/watchdog/reports/index.shtml

1.84 There are a number of similarities between the sector lists based on *Trends* data (incorporating data from the sector specific consumer bodies) and BBC Watchdog data. There are four sector categories common to both; 'non-life insurance', 'other professional services', 'home maintenance, repairs and improvements', and 'holidays'.

1.85 The sector categories that do not feature in the 'top 20' sector list based on *Trends* data are 'new cars', 'entertainment, catering and accommodation', 'toilet articles, perfumery, hairdressing, and beauty care', and 'lettings agencies and management'. Within the *Trends* data, these categories fall at ranks 23, 36, 51, and 65 respectively.[88]

1.86 On review of the individual case descriptions, within the 'entertainment, catering and accommodation' it is the ticketing and organisation of social/sporting events[89] that is the cause of all complaints made. Within the 'toilet articles, perfumery, hairdressing, and beauty care' the cause of complaints are 'gimmick' beauty products (e.g. henna tattoos, hair straighteners, acrylic nails).

1.87 We compare these outcomes to those identified by other sources of complaint data, in Sections 1.150 below.

Complaints posted on consumer complaint websites

1.88 There are a number of UK-based, private websites on the Internet which are dedicated specifically to consumer complaints. Some of the websites offer assistance to consumers in relation to making complaints in return for a small administrative fee, while others simply provide a forum for consumers to share their views or concerns about particular goods, services and suppliers. The sites range in size; some claiming to have handled over 5,000 complaints in recent times,[90] while others

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88 The ranking analysis utilises data over the annual period to March 2003, and includes data from the sector specific consumer bodies.

89 For example, a 'Star Trek convention' organised for profit by entrepreneur Manny Patel, or a cricket match series.

90 Howtocomplain.com. This consumer website is discussed in Section 0.

typically handle between one hundred and several hundred complaints each year.

1.89 These types of websites appear to be used by many consumers as a first point of call when faced with an unsatisfactory purchase.[91] Eventually, some of the complaints listed on these sites will also be taken to one of the trading standards departments and/or BBC Watchdog.[92] As such, high volumes of complaints about particular companies or sectors featured on these websites will provide a particularly useful indicator of the issues of immediate concern to consumers.

1.90 Another advantage of these information sources is that, as with the BBC Watchdog website, in most cases, the data sample is sufficiently small to allow the analyst to collate the data. Data can therefore be collated in a consistent format to other information sources (e.g. according to the OFT's sector classification system),[93] in order to facilitate comparison with these information sources.

1.91 On the other hand, the limited number of data points is also a limitation with these information sources. As noted above, many of the websites feature only several hundred complaints. This compares to the 850,000 complaints received by the trading standards departments each year. Nevertheless, as noted above, we consider that these sources remain

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91 As these websites are relatively more informal in nature, consumers are likely to find them more approachable compared to an official government body (such as a trading standards department). Consumers with little experience in making complaints or those that are somewhat uncertain about the significance of their claim are likely to use these websites to 'test' their claims.

92 For example, consumers issuing complaints via the website howtocomplain.com will be referred to trading standards departments and/or trade associations once the consumer has attempted to resolve the complaint directly with the supplier in question. As such, complaints issued initially via howtocomplain.com may eventually reach a trading standards department or similar consumer complaint body. Similarly, there are a references on the website grumbletext.co.uk signalling consumers' intentions to take complaints to the BBC Watchdog.

93 OFT, Classification of consumer complaints, effective April 1999.

useful as an indicator of emerging problems within specific markets, which may be missed by the *Trends* data. As such, it is relatively high volumes of complaints about particular sectors posted on these websites, both on individual sites and across websites, which are of most interest to the analysis.

1.92 One other potential disadvantage with these information sources is the degree to which the websites contain genuine complaints. We have taken care to include in our review only websites where we have been able to verify that the websites take care to display or handle only genuine complaints. We consider that evidence of this may include: (1) the website expects payment from consumers in return for posting the complaint, (2) the website sends all complaints received to the suppliers in question, providing an opportunity to reply, (3) the website includes a disclaimer claiming that it will remove or edit complaints which are found to contain inaccurate information, and/or (4) the website has been recommended or publicised by the media.

1.93 While we have taken care with our choice of websites, we note that, inevitably, a proportion of complaints posted on websites are likely to be of minor consequence. We expect however that this will also be a feature of other information sources (e.g. not all of the complaints received by the trading service departments will be of significance). As such, on balance, we consider that the information contained on these consumer complaint websites is useful for the market screening exercise.

1.94 We have identified and reviewed three websites that we consider of most use for the market screening exercise. These are:

- clik2complaints.co.uk
- grumbletext.co.uk, and
- complaintinfo.com.

1.95 Each of these information sources is discussed, in turn, in the sections below. The final subsection combines the data from each website, where appropriate, with the aim of providing an overview of consumer complaints posted on complaint websites, by sector. The ultimate objective is to create a list of the top 10 sectors featured on the complaint websites. This list will then be compared to the lists created using other sources of information. This comparison is detailed in Section 1.150.

1.96 In Section 1.165, we also include a brief overview of five additional consumer complaint websites: complaindomain.com, howtocomplain.com, referenceline.com, britishcompanies.co.uk, and CarpOn.com. For the reasons set out in the section, we do not recommend these information sources for the current market screening exercise. They may however prove useful for future market screening exercises (if the websites are updated or reformatted).

Clik2complaints.co.uk

1.97 Clik2complaints.co.uk[94] is essentially an Internet notice board for consumer complaints. Consumers submit their complaints to the website using the online form, detailing the supplier and the nature of the complaint. The complaint is then posted on the website and an email is sent to the supplier, providing them with an opportunity to reply to the claims made. Suppliers' replies are also posted on the website.

1.98 At the time of writing, there were over 350 consumer complaints posted on the website. Complaints dated over the period from July 2001 to February 2004. The website maintains that postings which are believed to be inaccurate in fact or detail are corrected or removed completely.

1.99 The website appears to be updated reasonably frequently; the most recent complaints posted on the website are dated February 2004. At the time of writing, the website featured a notice explaining that it was intending to archive older complaints and publish a number of newer complaints 'over the next few days'.

94 http://www.clik2complaints.co.uk/complaints.html

1.100 One of the key benefits of the website is that it houses a search facility, enabling the viewer to search complaints by goods/service category. This search facility can be used as a 'first cut' to determine the sectors which are most frequently complained about. To refine this sector list, individual complaints can be viewed and reallocated as necessary.

1.101 Table 1.7 provides a list of the ten most frequently complained about sectors, based on the complaints posted at clik2complaints.co.uk during 2003 and 2004.[95] We have adopted the *Trends* sector classification system to aggregate the complaints.[96]

Table 1.7: Complaints posted at Clik2complaints.co.uk - January 2003 to February 2004

Sector	Number of Complaints
Personal computers and related hardware	12
Non-life insurance	9
Home maintenance, repairs and improvements	8
Utilities (gas and electricity)	8
Furniture	6
Radio, TV and audiovisual equipment	6
Holidays	5
Internet service providers	5
Entertainment, catering, and accommodation	4
Cable/Satellite TV	4
Repairs to domestic appliances	4
Subtotal	**71**
Total complaints posted	**102**

Source: NERA analysis using complaint data at clik2complaints.co.uk

1.102 There is a broad similarity between the sector list compiled on the basis of clik2complaints.co.uk and the *Trends* data (after incorporating the data from the sector specific consumer bodies). Seven of the sector categories are common to both lists, including 'personal computers', 'non-life insurance', 'home maintenance, repairs and improvements', gas

95 As analysed at the time of writing, i.e. 1 April 2004.

96 We have utilised the website's sector categories as a first step in ordering the data.

and electricity services, furniture, audio visual equipment, and 'holidays'.

1.103 'Internet service providers', 'entertainment', 'cable/satellite TV' and 'repairs to domestic appliances' are the key exceptions. None of these categories feature in the sector list constructed on the basis of *Trends* data, and, with the exception of the category 'entertainment', none of these sectors feature in the BBC Watchdog's most complained about list. We note however, on review of individual complaints within the entertainment category, the cause of complaints is quite different in nature to those made to the BBC Watchdog. Most of the complaints posted on clik2complaints.co.uk in this category relate to restaurant or takeaway purchases.

'Grumbletext'

1.104 Grumbletext.co.uk[97] is another Internet notice board for consumers' complaints about goods and services. Complaints can be submitted via online forms or SMS text messages. A section of the website is dedicated to complaints and warnings about fraudulent SPAM messages to mobile phones. In addition to posting complaints, the website will also forward complaints to the companies concerned.[98] The website was established in 2003.

1.105 At the time of writing, there were over 1,000 messages posted on the website. These complaints were submitted either in 2003 or 2004.

1.106 Complaint notices are collated by goods/service category on the website.[99] This provides a reasonable first attempt in determining which sectors are most frequently complained about. However, there appears to be a degree of arbitrariness in the allocation of complaints to sector

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97 http://www.grumbletext.co.uk/phpbb2/index.php

98 Once a sufficient number of complaints have been received about a particular company.

99 Collated complaints are listed at: http://www.grumbletext.co.uk/phpbb2/viewforum.php?f=1

categories, and therefore the analyst needs to review individual complaints to ensure that they are allocated accurately.[100]

1.107 Table 1.8 provides a list of the ten most frequently complained about sectors based on complaints currently posted at grumbletext.co.uk by sector.[101] Wherever possible, in the collation process, we have attempted to choose categories which would facilitate comparison with the OFT sector classification system.

Table1.8: Complaints posted at Grumbletext.co.uk - March 2003 to April 2004

Sector	Number of Complaints
Home furnishings (includes furniture, floor coverings and home improvements e.g. new kitchens)	102
Road, rail, air and sea travel (excl car hire)	101
Mobile telecommunications	100
Food and drink	80
Electrical retailers	76
'High street' financials	74
Telecommunications	64
Couriers and fulfillment	38
Computers	28
Internet service providers	14
Cable/satellite companies	14
Subtotal	**691**
Total complaints posted on the website	**1,185**

Source: NERA analysis using complaint data at Grumbletext.co.uk

1.108 Despite the slightly different sector classification system adopted by grumbletext.co.uk, the types of goods and services featured within the list are very similar to those featured in the list based on *Trends* data

[100] For example, the website features a relative large number of complaints related to SPAM text. These have been reallocated to another, separate category, in order to avoid bias against the 'mobile phone and service' category.

[101] As at 5 April 2004.

(after incorporating the sector specific data). For example, the 'home furnishings' sector includes services which also feature prominently in the *Trends* sector list, such as services relating to 'home maintenance, repair and improvements', and 'furniture'. Similarly, mobile phones and services, telecommunications, computers, food and drink, and electrical goods also feature in the sector list based on *Trends* data.

1.109 The key exceptions are 'road, rail, air and sea travel' and 'internet service providers/cable companies'. On review of the individual complaints within the 'road, rail, air and sea travel' category, we find that it is airlines that attract the majority of complaints.

1.110 The 'internet service provider/cable company' category also features within clik2complaints.co.uk's most complained about list. However, the category 'road, rail, air and sea travel' does not feature in either of the lists compiled using BBC Watchdog or clik2complaints.co.uk data.

Complaintinfo.com

1.111 Complaintinfo.com[102] is a recently established complaint website. It offers a web-based complaint handling service to consumers at a cost of £5. The website also features reference material for consumers about making complaints, and 'noteworthy' public complaints are collated and posted on the website.[103]

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[102] http://www.complaintinfo.com/index.htm

[103] As such, complaints are commonly linked to complaints posted elsewhere on the Internet (e.g. on the BBC Watchdog website, or at clik2complaints.co.uk).

1.112 At the time of writing,[104] 73 consumer complaints were posted on the website. Many of the complaints are dated June and July 2003.[105]

1.113 The key advantages of complaintinfo.com relative to other websites are: (1) the visitor can search the website's database of complaints by sector; and (2) the website retains slightly older complaints which may have been removed from other websites which are regularly updated (such as the BBC Watchdog website).

1.114 Table 1.9 lists the ten most frequently complained about sectors based on the complaints currently[106] posted on the website. Wherever possible we have tried to adopt a consistent classification system to the *Trends* sector categories.

Table 1.9: Consumer complaints posted on Complaintinfo.com in 2003

Sector	Number of Complaints
Home maintenance, repairs and improvements	19
Motorised vehicles	9
Furniture	8
Other professional services (e.g. legal, recruitment, advertising)	6
Charities	5
White goods and major appliances	4
Pest control	3
DIY materials and tools	2
Other personal goods and services	2
Personal computers and hardware and software	2
Telecommunications	2
Total complaints posted on the website	**73**

Source: NERA analysis using complaint data at Complaintinfo.com

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[104] As at 1 April 2004.

[105] There is considerably more detail on the website in the section entitled 'visitors' views', however it is not possible to determine whether these are genuine claims. The website contains a disclaimer cautioning the browser that the visitors' views have not been confirmed, and the organisations that they relate to have not had an opportunity to reply. We have not attempted to review or collate the information within this section of the website.

[106] At the time of writing, 1 April 2004.

1.115 Despite the slightly different sector classification system, the types of sectors featured within the list are similar to those featured in the list based on *Trends* data (after incorporating the sector specific data). For example, the 'home maintenance, repair and improvements' category once again features prominently, as do the categories relating to furniture, motorised vehicles, other professional services, telecommunications, and computers.

1.116 There are no sector categories attracting a significant number of complaints, which do not already feature within the sector lists based on other information sources. Charities, pest control and 'DIY materials and tools' are possible exceptions, however the volumes of complaints attributable to these sectors are not significant.

Conclusion

1.117 Overall, there is a broad similarity between the complaints posted on complaint websites and those received by the trading standards departments. Home maintenance, repairs and improvements, computers, furniture, and home electrical goods, all feature in the top 10 sector lists of the three complaint websites.

1.118 Table 1.10 lists each of the sector categories featured on at least two of the three complaint websites that we have reviewed. The sector categories have then been ordered by taking a simple average of the ranks for each sector. We have not ranked sectors using a weighted average (e.g. by using the number of complaints posted on each of the websites). This is because: (1) a weighted average would bias the results strictly in favour of one website (i.e. Grumbletext), and (2) the purpose of the exercise is to identify sectors attracting relatively large volumes of complaints both on particular websites and across websites. A weighted average would mask the results across websites.

Table 1.10: Summary of complaints posted on consumer websites in 2003 and 2004

Sector	Clik2-complaints Rank	Grumble-text Rank	Complaint-info Rank	Average Rank	Overall Rank
Home maintenance, repairs and improvements	3	1[107]	1	1.7	1
Furniture	4	1[108]	3	2.7	2
Radio, TV and audiovisual equipment	4	5[109]	-	4.5	3
White goods and major appliances	-	5[110]	6	5.5	4
Personal computers and hardware and software	1	9	8	6.0	5
Telecommunications	-	7	8	7.5	6
Internet service providers	5	10	-	7.5	6
Cable companies	6	10	-	8.0	7

Source: NERA analysis

1.119 The results of this review of complaint websites are broadly in line with those of the *Trends* data. The possible exceptions are Internet service providers and cable/satellite television companies, which feature within the top 10 lists for two of the complaint websites.

107 Grumbletext's sector category 'home furnishings' includes home maintenance, repairs and improvements.

108 Grumbletext's sector category 'home furnishings' includes furniture.

109 Grumbletext's sector category 'Electrical retailers' includes radio, TV and audiovisual equipment.

110 Grumbletext's sector category 'Electrical retailers' includes white goods and major appliances.

1.120 Within the *Trends* data, 'Internet service providers' and cable/satellite television companies, fall at ranks 26 and 36 respectively.[111,112]

1.121 We compare these outcomes to those identified by other sources of recent complaint data, in Sections 1.150 below.

Complaints about false or misleading advertising content

1.122 There are a number of industry codes of practice in place which regulate advertising content in the UK. Individuals and other organisations may make complaints about alleged breaches to the administrators of these codes. The codes aim to protect individuals from false or misleading claims, and offensive or distasteful content.

1.123 Complaints relating to false or misleading claims are of particular interest to the market screening exercise. These complaints often relate to: (1) goods or services received by consumers failing to meet descriptions or specifications claimed in advertisements; (2) misleading pricing claims; and/or (3) unsubstantiated claims relating to the benefits or uses of goods or services. As such, these types of complaints may provide useful insights into areas where markets are not working as effectively as they might. They provide a broad indicator of sectors within which there may be informational problems, or may even provide a proxy indicator for consumer search costs.

1.124 The organisations responsible for handling these types of consumer complaints in the UK are the Advertising Standards Authority and Ofcom. Prior to the formation of Ofcom, it was the Radio Authority and the Independent Television Commission that regulated advertising content. The complaints handled by each of these organisations are discussed, in turn, in the sections below.

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[111] The ranking analysis utilises data over the annual period to March 2003, and includes data from the sector specific consumer bodies.

[112] The rank for cable/satellite television companies assumes that these services are allocated to the category 'entertainment, catering and accommodation' under the Trends classification system.

1.125 Note that, given the lack of complaints investigated by Ofcom at this time, we only consider data held by the Radio Authority and the Independent Television Commission at this stage. Nevertheless, we provide an overview of Ofcom data sources in Section 1.165, to aid future market screening exercises by the OFT.

1.126 The final subsection combines the data sets obtained from each organisation. Section 1.150 then compares the sectors commonly featured in advertising complaints to those featured in other types of consumer complaints.

Complaints to the Advertising Standards Authority

1.127 The Advertising Standards Authority ('ASA') is responsible for handling complaints in respect of non-broadcast advertisements in the UK.[113] The advertising industry code[114] requires advertisements in the UK to be 'legal, decent, honest and truthful; prepared with a sense of responsibility to consumers and to society, and in line with the principles of fair competition generally accepted by business'.[115]

1.128 Complaints may be made to the ASA by individual consumers, or from industry or companies complaining about their competitor's advertising. Trading standards departments also frequently make complaints on behalf of consumers. Non-broadcasting advertising mediums encompass billboard posters, the national press, direct mail, Internet, email and SMS or text messaging.

1.129 Each year the ASA receives some 12,000 complaints. The most common cause of complaints relate to false or misleading claims (about

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[113] Ofcom is currently responsible for administering broadcasting complaints (in relation to both advertising and programming complaints). The Independent Television Commission and the Radio Authority previously held responsibility for these types of complaints. For further information, see: http://www.ofcom.org.uk/bulletins/adv_comp/?a=87101 These types of complaints are considered further in Section 0.

[114] The ASA administers the British Code of Advertising, Sales Promotion and Direct Marketing. The most recent edition of the Code came into force on 4 March 2003. A copy is available at: http://www.asa.org.uk/index.asp

[115] Source: ASA website, http://www.asa.org.uk/index.asp.

25 percent of all complaints received), closely followed by complaints about taste and decency. Other complaints received by the ASA relate to, for example, non-receipt of goods or promised refunds, and the use of personal information for marketing purposes.

1.130 Details of the number and nature of complaints received by the ASA are compiled in a series of reports produced by the ASA.[116] These reports include a breakdown of complaints by sector. Such information is available over the period from January 1999 to December 2003 (annually to December 2002, and quarterly thereafter). Unfortunately, cross tabulation of complaints by sector and by cause is not available.

1.131 Table 1.11 contains a summary of the complaints received by the ASA annually, by sector. Note that the table denotes all complaints received by the ASA (and not only those relating to false or misleading advertising content).[117] The table has been sorted according to the most frequently complained about sector in 2003.

[116] Records of total complaints received by the ASA date back to 1995.

[117] Note: the figures for 2003 do not denote the number of complaints received by the ASA. Rather, these figures denote the number of investigations of advertisements conducted by the ASA which were upheld (i.e. found to be in breach of the British Code of Advertising, Sales Promotion and Direct Marketing).

Table 1.11: Complaints received and handled by the Advertising Standards Authority

Rank	Sector	1999	2000	2001	2002[(1)]	*2003[(2) (3)]*
1	Leisure	2,772	2,116	2,904	3,622	*107*
2	Health and beauty	976	2,055	1,199		*87*
3	Computers and telecommunications	1,028	1,518	1,732		*61*
4	Household	447	506	501		*55*
5	Holidays and travel	702	576	816		*48*
6	Motoring	607	533	635		*37*
7	Business	330	379	755	559	*29*
8	Retail	279	272	173	419	*26*
9	Financial	527	590	562	478	*24*
10	Employment	409	385	199		*18*
10	Publishing	1,236	645	367		*18*
	Number of advertisements complained about and upheld	-	-	-	-	*620*
	Total complaints received	**12,14**	**12,38**	**12,58**	**13,958**	**11,128**

Source: Advertising Standards Authority website[118]

Notes: (1) Figures taken from an ASA briefing note. A complete list of complaints by sector was not published in 2002. (2) 2003 figures cover the period 11 December 2002 - 17 December 2003. Data elsewhere in the table relate to calendar years (i.e. 1 January to 31 December). (3) The figures in this column are the number of advertisements investigated by the ASA (in response to complaints) resulting in the complaint(s) being upheld. Data elsewhere in the table denotes the total number of complaints received by the ASA (i.e. these figures include complaints that were not upheld or resolved informally. These total complaint figures also include the number of individual complaints made about an advertisement). As such, figures for 2003 and other years are not directly comparable.

[118] Website address is: http://www.asa.org.uk/index.asp. Reports are listed and available for download in the section entitled 'statistics'.

1.132 In 2003, the most frequently complained about sector to the ASA was the leisure sector. This was also the most frequently complained about sector in each year between 1999 and 2002. This sector category encompasses a variety of goods and services such as betting and gaming, pay television services, sports equipment, travel goods, video and DVD hiring services, and video game products.[119] Reviewing adjudications by the ASA on individual complaints within this sector, suggests that investigations are fairly evenly spread across each of these sub-groups, and almost all of the ASA's investigations within the sector relate to allegations of false, misleading or unsubstantiated advertising content.[120]

1.133 The ASA's leisure sector category corresponds most closely to the OFT sector categories 'entertainment, catering and accommodation', 'betting, competitions, and other prize draws', 'toys games and video consoles', and CDs, audio and video tapes, records, video games, software and computer software'.

1.134 The next two sectors that are most commonly complained about to the ASA are the health and beauty and the computers and telecommunications sector categories. The health and beauty category relates to goods and services such as cosmetic surgery, weight loss equipment and advice, cosmetic products and beauty treatments, herbal treatments, and also veterinary clinics and medicine. The computers and telecommunications category includes mobile and fixed telephony services (including voice, broadband, and premium rate services), suppliers of new and refurbished computer equipment, and suppliers of software. As with leisure sector complaints, based on a review of recent adjudications on individual complaints, it appears that the vast majority of the ASA's investigations within these sectors relate to allegations of false, misleading or unsubstantiated advertising content.

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[119] Note: the ASA has not published formal definitions for its sectoral classification system. The type of goods and services falling within the sector has been determined by researching the companies that are stated to belong to the 'leisure' sector.

[120] Recent adjudications by the ASA can be viewed, by sector, at: http://www.asa.org.uk/adjudications/index.asp

1.135 These two sector categories encompass the OFT's sector categories 'other personal goods and services' and 'toilet articles, perfumery, hairdressing and beauty care'; and 'personal computer and related hardware', 'mobile phones and services', 'telecommunications exc mobile phones', and 'internet service providers'.

Complaints to the Independent Television Commission

1.136 Before Ofcom was established in December 2003, the Radio Authority and the Independent Television Commission ('ITC') were responsible for handling complaints about broadcast advertisements. Like Ofcom, these entities also maintained reports listing the complaints that they handled. The Radio Authority produced quarterly reports,[121] and the ITC produced fortnightly reports.[122]

1.137 On review of these older archived reports, it appears that the vast majority of complaints made about radio advertisements relate to offensive or harmful content. The majority of complaints made about television advertisements relate to misleading content. For the purposes of the market screening exercise, we have therefore only reviewed complaints made to the ITC.

1.138 ITC complaint data dates back to 1997. The fortnightly reports contain brief summaries of complaint cases, including the nature of complaints and the outcome of each ITC investigation. In addition to its fortnightly briefs, the ITC produced a report detailing all the substantive cases it considered from October 1997 to December 2003. This report details more than 1,000 advertisements (approximately 170 advertisements per

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[121] An archive of these is contained at: http://www.ofcom.org.uk/static/archive/rau/regulation/quart-bulletins/quartbull-main.html

[122] These are archived at: http://www.ofcom.org.uk/static/archive/itc/itc_publications/complaints_reports/advertising_complaints/index.asp.html

annum),[123] including both advertisements containing misleading claims and offensive/harmful content.

1.139 Utilising the OFT sector classification system, we have compiled a summary of advertisements investigated by the ITC, by sector, for the calendar year 2003.[124] Note that we have only included in our analysis advertisements which were judged to be false or misleading (rather than also including advertisements containing offensive content). Table 1.12 contains the results of our analysis, listing the 10 most frequently complained about sectors.

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[123] Many of these advertisements were the subject of more than one complaint (e.g. some advertisements attracted up to 4 complaints). This implies that the number of complaints handled per year by the ITC is much greater than 170 per annum.

[124] We have not compiled summaries for the years 1997 to 2002. This would be a considerably time-intensive exercise. Given the purpose to which the data will be put, in our view, this would not be a particularly effective use of time. We have therefore not attempted to undertake the analysis, and would not recommend that this be undertaken by the OFT in future market screening exercises.

Table 1.12: Substantive complaints made to the Independent Television Commission in 2003

Rank	Sector	Number of advertisements
1	Other personal goods and services	14
2	Holidays	12
3	Toilet articles, perfumery, hairdressing and beauty care	10
4	Mobile phones and services	8
4	Telecommunications exc. mobile phones	8
5	Food and drink	7
6	CDs, audio and video tapes, records, video games software, computer software	6
6	Entertainment, catering and accommodation	6
7	Hardware, cleaning materials	5
7	Personal computers and related hardware	5
	Total number of misleading advertisements considered by the ITC	**127**

Source: Figures compiled on the basis of information on the Ofcom website (archived ITC material)[125]

1.140 In 2003, the most complained about advertisements related to the 'other personal goods and services' sector category. In this category, we have included complaints about services such as weight loss advice and equipment and natural therapies, which comprise the vast majority of complaints.

1.141 The category 'holidays' was the next most complained about sector category. This sector category relates to holiday packages and accommodation.

[125] http://www.ofcom.org.uk/static/archive/itc/itc_publications/complaints_reports/advertising_complaints/complaints_report.asp-type=complete.html

1.142 Complaints relating to toilet articles, perfumery, hairdressing and beauty care were the next most common.

Summary and conclusions

1.143 There is a broad degree of similarity in terms of the complaints investigated by the ASA and the ITC in 2003. Although the sector categories adopted by the regulators are slightly different, they can be aggregated for the purposes of identifying the 'most complained about' sectors.

1.144 We have chosen to aggregate 2003 complaint data. We consider this approach to be most appropriate given that: (1) we have only compiled 2003 data for the ITC,[126] (2) ASA and ITC records are comparable for 2003 – both relate to substantive advertisements which were investigated as a result of a complaint(s) and then upheld, and (3) a current indicator of complaints is most useful for the market screening exercise. The result of the aggregation analysis is contained in Table 1.3. The table lists the five sectors that most frequently advertise content which is complained about. We have identified only five sectors, rather than ten sectors, given that we have adopted relatively broad sector categories compared to other complaint sources.

[126] As noted in section 1.136, the volume of complaints received by the ITC prior to 2003 and the form in which the data is reported does not lend itself to swift collation.

Table 1.13: Complaints investigated and upheld by the ASA and ITC in 2003

Sector	ASA	ITC	Total Ads	Total Complaints(6)	Rank
Leisure (including betting, pay TV, sports equipment, audio and visual tapes and CDs, video games)	107	23(1)	130	390	1
Health and beauty (including weight loss and herbal products)	87	25(2)	112	336	2
Computers and telecommunications	61	25(3)	86	258	3
Household (includes furniture, house maintenance, repair and improvements)	55	13(4)	68	204	4
Holidays and travel	48	15(5)	63	189	5
Total	**358**	**101**	**459**	**1,377**	

Source: Figures have been derived on the basis of data contained in Table 1.11 and Table 1.12. Notes: (1) This figure includes the complaints attributable to the OFT sector categories 'CDs, audio and video tapes, records, etc', 'entertainment, catering and accommodation', 'books, newspapers and magazines', 'sports goods, hobbies, etc' 'toys, games and video consoles' 'betting, competitions and prize draws'; (2) this figure includes complaints attributable to the categories 'other personal goods and services', 'toilet articles, perfumery, hairdressing, and beauty care and 'pharmaceutical products, dental, etc'; (3) this figure includes complaints attributable to the categories 'mobile phones and services', 'telecommunications excl mobiles', 'internet service providers' and 'personal computers and hardware'; (4) this figure includes complaints attributable to the categories 'hardware, cleaning materials', 'DIY tools and equip', 'furniture', 'home maintenance, repairs and improvements', (5) this figure includes complaints attributable to the categories 'holiday', and 'road, rail air, and sea travel'; (6) figures for total number of complaints are estimates only; they have been estimated by using the average number of complaints per advertisements investigated by the ASA in 2003.[127]

[127] We have estimated that, on average, 3 complaints are received for each advertisement that is upheld. This has been calculated by taking the average number of complaints received and upheld by the ASA in 2003, relative to the number of advertisements upheld by the ASA in 2003. Source: *ASA Summary Report*, Volume 3, Issues 1-4.

1.145 Leisure goods (including betting, pay TV, sports equipment, audio and visual tapes and CDs, video games) is the most commonly complained about sector, followed by health and beauty products, computers and telecommunications, holidays and travel and then household items (encompassing items such as furniture and house maintenance, repair and improvements).

1.146 While the majority of advertisements analysed relate to false or misleading content,[128] a small proportion of the advertisements included in the analysis relate to complaints about offensive or distasteful content.

1.147 It should be noted that the table lists the number of advertisements investigated and upheld by the ASA and ITC (rather than simply the number of complaints received). Both of these entities receive a vast number of complaints, many of which are not upheld. For example, in 2003, the ASA handled about 11,700 complaints in total (while only about 1,800 complaints were upheld). Further, several complaints received by the ASA may be directed at the one advertisement. For example, each advertisement that was investigated and upheld by the ASA in 2003 attracted, on average, 3 complaints each.

1.148 Accordingly, the figures listed in the table will underestimate the volume of complaints attributable to any one sector (relative to the complaints received by the trading standards departments). We have therefore included an additional column in the table which contains an estimate of the number of complaints received and upheld, by sector. We stress that this is only an estimate. It is based on the average number of upheld complaints received per advertisement by the ASA in 2003.[129]

1.149 We compare these outcomes to those identified by other sources of recent complaint data, in Sections 1.150 below.

[128] e.g. all of the advertisements listed as being investigated by the ITC relate to misleading content.

[129] That is, 3 complaints per advertisement.

Summary and conclusions

1.150 The previous sections contained analyses of complaints received by the trading standards departments, sector specific consumer bodies (such as the Financial Ombudsman, Energywatch, and ABTA), BBC Watchdog, three privately maintained consumer complaint websites, the ASA and the ITC. Table 1.14 provides a summary of the sector categories commonly featured within the sector lists created on the basis of these data sources, together with their rankings on the basis of number of complaints received/investigated.

Table 1.14: Summary of complaint data sources and sector rankings

Sector	Trading Standards[(1)]	BBC Watchdog	Complaint websites	ASA and ITC
Home maintenance, repairs and improvements	1	2	1	4[(2)]
Electricity	2	-	-	-
Second-hand motor vehicles	3	-	-	-
Telecommunications exc. mobile phones	4	-	6	3[(4)]
Mobile phones and services	5	-	-	3[(4)]
Other personal goods and services	6	-	-	2[(3)]
Gas	7	-	-	-
Holidays/Travel agents	8	2	-	5
Radio, TV, and audiovisual equipment etc	9	-	3	-
Large white goods and major fixed appliances	10	-	4	-
Upholstered furniture	11	-	2	4[(2)]
Personal computers and related hardware	12	-	5	3[(4)]
Clothing and clothing fabrics	13	-	-	-
Food and drink	14	-	-	-
Double glazing products and installation	15	-	-	4[(2)]
Mortgages and other secured credit	16	-	-	-
Motor vehicle repairs and servicing	17	-	-	-
Other professional services	18	1	-	-
Furniture (other than upholstered, nursery or garden), pictures etc	19	-	2	4[(2)]
Non life insurance	20	1	-	-
Internet service providers	26	-	6	3[(4)]
Cable and satellite TV companies	36[(6)]	-	7	1[(5)]
Betting, competitions, prize draws	22	-	-	1[(5)]
CDs, audio and video tapes, records, video games software, computer software	32	-	-	1[(5)]
New motor vehicles	23	1	-	-
Entertainment, catering and accommodation	36	2	-	1[(5)]
Toilet articles, perfumery, hairdressing, and beauty care	51	3	-	2[(3)]
Lettings agencies and management	65	3	-	-

Source: NERA analysis

Notes (1) the rankings in this column also reflect data from the sector specific consumer bodies such as the Financial Ombudsman and Energywatch; (2) ranking reflects the ranking of the sector category 'household' in Table 1.13; (3) ranking reflects the ranking of sector category 'health and beauty' in Table 1.13; (4) sector ranking reflects the ranking of category' computers and telecommunications' in Table 1.13; (5) reflects the ranking of the sector category 'leisure' in Table 1.13; (6) this rank assumes that services provided by cable/satellite television companies are allocated to the category 'entertainment, catering and accommodation' under the Trends classification system.

1.151 The objective of the market screening exercise is to identify between five and ten sectors that are commonly complained about by consumers. Given the incompatibility of data across information sources, it is not appropriate to simply collate the data from each of the information sources on the basis of number of complaints. For example, data from the ASA and the ITC reflects 'substantive'[130] complaints from consumers which have been investigated and upheld by these bodies. Similarly, the BBC Watchdog data reflects only a proportion of complaints received by the BBC Watchdog. In contrast, the *Trends* data includes the vast majority of complaints received by trading standards departments (excluding general enquiries), and may include a significant proportion of complaints which are not substantive.

1.152 We propose to collate the results by taking a simple average of the rankings for each sector category featured in at least one of the sector lists compiled in the analysis (i.e. contained within sections1.70, 1.78, 1.117, and 1.143). We do not propose to adopt a weighted average given that, as noted above, weighting on the basis of number of complaints received would not be appropriate due to data consistency problems. No other meaningful and objective weighting system could be developed.

1.153 Table 1.15 lists the fifteen sectors which receive the most complaints, according to the ranking methodology. We have included fifteen sectors in our analysis (rather than ten), given that utilities feature prominently in the sector list. These are typically the focus of sectoral regulators

[130] The term is used by the ITC to describe the nature of complaints investigated.

such as Ofcom and OFGEM, rather than the OFT. The list thereby covers the ten non-utility sectors attracting the most consumer complaints.

1.154 We recognise that the mapping of sector categories between the ASA/ITC data sources and the remaining sources is not ideal (e.g. we have taken the ASA's 'household' sector category and mapped it to all of the relevant OFT sector categories, including 'home maintenance, repairs and improvements', 'upholstered furniture', and 'furniture (other than upholstered, nursery or garden), pictures etc'). We note however that this has a small impact on the sector ranking results. It makes no impact on the sectors included in the top five, and makes a small change to the top ten list (e.g. 'other professional services' and 'non-life insurance' would enter the top 10 list without the ASA/ITC data).

Table 1.15: The 'Top 15' most frequently complained about sectors

Sector	Rank					
	Trading Standards Depts[(1)]	BBC Watch-dog	Complaint websites	ASA and ITC[(2)]	Average	Overall
Home maintenance, repairs and improvements	1	2	1	4	2.00	1
Electricity	2	-	-	-	2.00	1
Second-hand motor vehicles	3	-	-	-	3.00	2
Mobile phones and services	5	-	-	3	4.00	3
Other personal goods and services	6	-	-	2	4.00	3
Telecommunications exc. mobile phones	4	-	6	3	4.33	4
Holidays/Travel agents	8	2	-	5	5.00	5
Upholstered furniture	11	-	2	4	5.67	6
Radio, TV, and audiovisual equipment etc	9	-	3	-	6.00	7
Personal computers and related hardware	12	-	5	3	6.67	8
Gas	7	-	-	-	7.00	9
Large white goods and major fixed appliances	10	-	4	-	7.00	9

Sector	Rank					
	Trading Standards Depts(1)	**BBC Watch-dog**	**Complaint websites**	**ASA and ITC(2)**	**Average**	**Overall**
Furniture (other than upholstered, nursery or garden), pictures etc	19	-	2	4	8.33	10
Double glazing products and installation	15	-	-	4	9.50	11
Other professional services	18	1	-	-	9.50	11

Source: NERA analysis

Notes (1) includes data from sector specific consumer bodies such as the Financial Ombudsman and Energywatch; (2) note that the ASA sector categories have been mapped to the OFT sector categories (see Table 1.14 for further details).

1.155 The category 'home maintenance, repairs and improvements' and 'electricity' are the most complained about sectors. The category 'home maintenance, repairs and improvements' is the only category to feature in the top 5 sector lists of all the consumer complaint sources investigated. The high ranking of the electricity sector, owes largely to the large numbers of complaints received by Energywatch.

1.156 The third most complained about sector relates to the sales of second hand motor vehicles, owing solely to the large volumes of complaints received by the trading standard departments.

1.157 The fourth and fifth most complained about categories relate to mobile phones and 'other personal goods and service'. Large volumes of complaints about mobiles were received by the trading standards departments, Oftel, the ASA and the ITC. The 'other personal goods and services' category ranks highly in terms of complaints received by the ASA and the ITC, as well as the trading standards departments. The OFT sector classification scheme defines this category to include travel and leather goods, stationary, fancy goods and marriage and introduction agencies. In our classification of complaints received by the ASA and the ITC we have also assigned complaints relating to weight loss equipment and advisory services to this service category.

Other sources not suitable for market screening at this stage

1.158 This section details a number of information sources identified over the course of our research, but omitted from the market screening exercise either due to data formatting problems or where the source did not appear to be up to date. In the event that these factors change, we recommend that these sources be investigated in future market screening exercises. Section 1.191 explains more fully how these sources may be incorporated into future analyses.

1.159 We do not discuss Consumer Direct in this section. Consumer Direct is likely to provide an additional source of information for future market screening exercises. However, given that the initiative is not yet established, we are unable to comment further.

Complaints to Citizens Advice Bureaux

1.160 Citizens Advice is essentially a free legal advice centre for individuals. It provides advice on a diverse range of legal issues, one of which is consumer rights. Established in 1939 as a registered charity,[131] the organisation operates through a number of local branches in over 2,800 locations throughout England, Wales and Northern Ireland.[132]

1.161 Citizens Advice reports that it deals with a total of over 5.5 million new cases each year.[133] About 1.5 million (or 27 percent) of these concern

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[131] Its registered name is The National Association of Citizens Advice Bureaux.

[132] Citizen Advice also operates in Scotland under the banner of Citizens Advice Scotland. All branches are also able to offer advice on non-consumer right matters such as social benefits, housing, legal matters, employment, and immigration. Source: Citizens Advice Bureaux website, http://www.citizensadvice.org.uk/aboutus.ihtml

[133] As reported in Citizens Advice's 2002/03 Annual Report (page 11). The report is available at: http://www.citizensadvice.org.uk/publications.ihtml

consumer related issues, of which the vast majority (about 1 million of cases) concern consumer debt problems.[134]

1.162 Citizens Advice details the number and types of cases it handles each year in its annual reports. Cases are grouped into six categories: employment, social security, housing, legal systems,[135] immigration, and consumer and debt. Cases concerning consumer and debt issues are further disaggregated into ten categories; consumer debt, goods and services, credit and finance, insurance, other consumer problems, housing debt, utilities debt, tax debt, other debts, and other utility problems. Further disaggregated data, for example, by sector, is not publicly available. Table 1.16 details the information on consumer complaints available from the Citizens Advice annual reports.

Table 1.16: Consumer and debt problems handled by Citizens Advice

Problem srea	1998/99(1)	2001/02(2)	2002/03(3)
Consumer debt		646,787	671,077
Goods and services		238,385	219,178
Credit and finance		90,828	88,918
Insurance		52,287	48,861
Other consumer problems		36,934	31,627
Housing debt		118,234	117,408
Utilities debt		86,063	35,476
Tax debt		69,495	68,265
Other debt		86,545	83,265
Other utility problems		42,773	41,175
Total	1,005,643	1,468,331	1,455,735

Sources: (1) Citizens Advice, Modern Markets – Confident Consumers: Response to the DTI's White Paper, 1999 (only the total figure was reported); (2) Citizens Advice Annual Report 2001/02; (3) Citizens Advice Annual Report 2002/03. These are available on Citizens Advice website.[136]

[134] As reported in Citizens Advice's 2002/03 Annual Report (page 12).

[135] That is, problems citizens' face concerning legal institutions such as tribunal proceedings, legal aid, etc.

[136] Annual reports are available at: http://www.citizensadvice.org.uk/publications.ihtml

1.163 In addition to the information in annual reports, we understand that Citizens Advice also maintains an internal database of case information. We understand that this database however, does not currently distinguish between different types of goods and services, and a considerable amount of work would be required to extract such information.[137] We therefore have not investigated the source any further.

1.164 In view of this, we suggest that complaints handled by Citizens Advice is not, at present, a practical source of information for the OFT's market screening purposes.

Complaints to Ofcom about false and misleading advertising

1.165 Ofcom has held responsibility for handling complaints relating to broadcast advertisements since December 2003.[138] A range of interested parties including individual consumers, competitors of the company making the advertisement, or organisations representing consumer interests, may make complaints. Complaints may concern, for example, harmful or offensive content, and/or misleading claims.

1.166 Ofcom produces a short report each fortnight containing a list of the complaints it has handled.[139] These reports contain a brief summary of each complaint, including the reason the complaint was made and how it was resolved. At the time of writing,[140] there were only five such reports on the Ofcom website, dating from 3 February to 30 March 2004. Table 1.17 compiles a summary of complaints made over this period, by sector.

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[137] OFT, Survey of Consumer Complaint Information, Internal Memo, undated. Provided to NERA on 29 March 2003.

[138] Ofcom inherited the duties of the following five regulators: the Broadcasting Standards Commission, the Independent Television Commission, Oftel, the Radio Authority and the Radiocommunications Agency. As noted earlier, previously, the Independent Television Commission and the Radio Authority had held responsibility for complaints about broadcasting advertising material. Complaints handled by these bodies are discussed further in Section 0.

[139] These are available at: http://www.ofcom.org.uk/bulletins/adv_comp/?a=87101

[140] That is, as at 31 March 2004.

Table 1.17: Complaints received by Ofcom concerning misleading advertisements in 2004

Ran	Sector	Number of complaints
1	CDs, audio and video tapes, records, video games software and computer games	4
2	Other personal goods and services	3
3	Holidays	2
4	Telecommunications	2
5	Furniture	1
6	Pharmaceutical products, dental optical and other medical services	1
7	Radio, TV, and audio visual equipment, etc	1
8	Upholstered furniture	1

Source: Figures compiled on the basis of data contained in Ofcom, Advertising Complaint Bulletins (3 February 2004 – 30 March 2004).

1.167 Given that Ofcom has only been established for a few months, and has handled relatively few complaints over this period, we do not propose to include Ofcom data the market screening exercise at this stage. However, looking forward, we would expect Ofcom data to be of use. Once a years' worth of data is available, we recommend it as an additional information source for future exercises by the OFT. We would expect this to replace the ITC data source, discussed in Section 1.136.

Consumer websites not included in the analysis

1.168 As indicated in Section 1.88, there are a number of privately maintained, consumer complaint websites on the Internet. We have incorporated information from three of these in our analysis. Our research however has identified five additional websites. While these were not included in our analysis at this time (for the reasons set out below), we do recommend a brief review of these website for future exercises. In particular, circumstances may have changed, and the websites may have been updated to include more current and therefore relevant information.

Complaindomain.com

1.169 Complaindomain.com[141] offers a web-based complaint handling service for consumers at a cost of £20.[142] The consumer simply provides details about their complaint by completing an online form (including the name of the supplier, the nature of the complaint, etc). Complaindomain.com then takes the complaint up with the supplier on the consumer's behalf. The website is said to specialise in handling complaints about 'faulty' goods and services.[143]

1.170 The website reports that it is the leading consumer complaint website, handling '100s' of complaints each year. It also reports to have received complaints from individuals at Which?,[144] seeking help to carry complaints forward for them.[145] Also, other websites which we have reviewed recommend complaindomain.com as an additional source of information, providing links to the website.[146]

1.171 Unfortunately, limited details are available on the website about the actual complaints that have been made by consumers via the website (unlike some complaint websites, complaints are not posted on the website). In addition to the individual complaint information available on the website, in August 2002, complaindomain.com issued a press release reporting the most frequently complained about sectors.[147]

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[141] http://www.complaindomain.com/index.html

[142] In return for payment, Complaindomain.com guarantees to 'do everything' it can to represent consumers' interests. It does not guarantee to resolve the consumers' complaints. The service includes drafting a letter to send to the supplier in question, liaison with the supplier in an effort to resolve the matter, and keeping the customer informed of progress.

[143] See: http://www.pressbox.co.uk/Detailed/6545.html

[144] *Which?* is published by the Consumers' Association.

[145] See: http://www.pressbox.co.uk/Detailed/6545.html

[146] For example, 'British Companies': http://www.britishcompanies.co.uk/index.htm.

[147] See: http://www.pressbox.co.uk/Detailed/6545.html. The press release also provides details about the most complained about company.

However, this information relates to the period 1 July 2001 to 30 June 2002.

1.172 Given that the data dates back to 2001/02, we do not recommend incorporating it in the market screening exercise.

'How to complain' online

1.173 Howtocomplain.com[148] is a website which aims to explain to consumers how they might go about making a complaint. The website can also be used by consumers to lodge complaints either to suppliers, trade associations, trading standards departments, or other complaint handling bodies. The website, however, does not offer individual complaint handling services per se. It is intended as a purely informational website.

1.174 The website contains an analysis of complaints lodged through the website, including an analysis of complaints by sector.[149] While this is a promising source of information (encompassing 5,000 or more complaints), the sector categories adopted by howtocomplain.com are highly aggregated and are not readily comparable to the *Trends* categories or those adopted by other websites. We understand from the creators of howtocomplain.com that it would be possible to obtain more disaggregated information.[150] A quote of £670 per query field has been provided for the provision of such information.[151] The disaggregated information, however, would still contain a number of aggregated sector categories incompatible with the *Trends* classification system (e.g. internet shopping). We therefore do not recommend use of howtocomplain.com for the purposes of the market screening exercise.

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148 http://www.howtocomplain.com/

149 An analysis of the nature of complaints (e.g. customer service, selling technique), and suggested resolution by consumer (e.g. financial compensation) is also included on the website.

150 Email correspondence over the period 1 April to 7 April 2004.

151 Email dated 14 April 2004.

Referenceline.com

1.175 Referenceline.com[152] provides details about the reliability (or lack thereof) of a number of suppliers of goods and services in the UK. It posts customers' recommendations, as well as complaints about the supplier. Information on the website is updated quarterly. It appears that there are around 10,000 suppliers listed on the website.

1.176 Unfortunately, while the website is a promising information source, the format of the website makes it difficult for the analyst readily to access complaint information. If the analyst were to systematically review the entry for each company, then a database of complaints could be compiled by sector.[153] However, clearly, this would be an extremely labour intensive exercise, and impractical for the market screening exercise. We have therefore not investigated this information source any further.

'British Companies'

1.177 British Companies[154] is an Internet directory of British based companies. The website is divided into sections by goods/service sector, and one section of the website is dedicated to consumer complaints.[155] At the time of writing however, only 19 complaints about goods and services were posted on the website. Given the limited amount of data, the website is unlikely to be representative of consumer complaints in general, and therefore we have not investigated the source any further.

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[152] http://www.referenceline.com/contact_us/index.htm

[153] Companies are already sorted by goods/service category.

[154] http://www.britishcompanies.co.uk/index.htm

[155] See: http://www.britishcompanies.co.uk/complaints.htm

CarpOn.com

1.178 Another website which essentially acts as a notice board for consumers to post their complaints is CarpOn.com.[156] At the time of writing,[157] however, the website contained less than 50 complaints, and those posted were quite outdated; most complaints relating to the years 2000 and 2001. We have therefore not investigated this information source further.

Product surveys and campaigns

1.179 Three entities that play a major role as consumer advocates in the UK are the National Consumer Council, the Consumers' Association, and the National Consumer Federation. While none of these play a major role in the investigation or resolution of individual consumer complaints, they do conduct research about products and services and run campaigns to raise consumer awareness about specific issues within a sector. As such, these organisations' current research and campaign focus is potentially a useful indicator for the market screening exercise. We consider each of these bodies in turn, below.

National Consumer Council

1.180 The NCC was established in 1975 by the UK government, as a non-departmental public body, and it has a special remit to focus on disadvantaged consumers.[158] While the NCC does not have statutory powers to become involved with individual consumer complaints, it does conduct research on matters of concern to consumers and represents consumers at a policy-making level.

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[156] http://carpon.com/WEB/main.htm

[157] 7 April 2004.

[158] Source: NCC website, http://www.ncc.org.uk/about/faq.htm#CA

1.181 The NCC website contains a number of reports detailing the results of sector-specific consumer surveys undertaken by the Council. Surveys that were conducted in 2003 and 2002 include:

- consumer attitudes/perceptions to 'green' goods and sustainable consumption[159]
- consumer perceptions of food labelling[160]
- consumer views on risk,[161]and
- consumer attitudes, perceptions and decisions on consumer credit.[162]

1.182 It would be possible to construct a relatively simple indicator of ‘problem’ sectors on the basis of the number of surveys conducted by the NCC. The sectoral focus of surveys could be collated, and the sectors ranked, to form a top 10 sector list, similar to the method adopted for other information sources. However, this would be a somewhat labour intensive exercise. Another limitation is that the NCC appears to conduct only a few surveys a year, providing a limited sample size for the indicator. We have therefore not investigated this information source any further.

Consumers’ Association

1.183 The Consumers’ Association is the largest consumer organisation in Europe. It was established in 1957, and is a non-profit organisation, which focuses on research and campaigns on consumer matters. It also publishes the consumer affairs magazine *Which?*.[163]

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159 http://www.ncc.org.uk/pubs/pdf/green_choice.pdf

160 http://www.ncc.org.uk/pubs/pdf/bamboozled.pdf

161 http://www.ncc.org.uk/pubs/pdf/riskfindings.pdf

162 http://www.ncc.org.uk/pubs/pdf/credit_findings.pdf

163 Source: http://www.which.net/corporate/contents.html and http://www.which.net/

1.184 Perhaps the most useful indicator of key sectoral areas currently of concern to consumers is the Association's press releases. Press releases cover new and significant surveys conducted for the purposes of *Which?,* and other activities of the Consumers' Association. For example, at the time of writing, the webpage featured a number of press releases concerning beauty products, suppliers of food and drink, motor vehicles, services relating to holidays, and airlines.[164]

1.185 The sectoral focus of these press releases could be collated, and the sectors ranked, to form a top 10 sector list, similar to the method adopted for other information sources. However, this would be a somewhat labour intensive exercise. We have therefore not investigated this information source any further.

National Consumer Federation

1.186 The National Consumer Federation ('NCF') is a voluntary organisation, funded through membership subscriptions and occasional grants from the Department of Trade and Industry. It brands itself as the 'grassroots consumer watchdog', and is affiliated with local consumer groups in 13 locations around the UK.[165],[166]

1.187 The NCF publishes a quarterly publication *Consumer News* featuring stories about key issues of concern to consumers, by region in the UK.[167] Many of the articles have a sectoral focus. The focus of these stories could be collated, and the sectors ranked, to form a top 10 sector list, similar to the method adopted for other information sources. However, once again, this would be a labour intensive exercise. It would also produce a relatively sparse amount of data (between five and ten sectors commonly feature in each quarterly issue, giving a maximum

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164 http://www.which.net/media/pr/prcontents.html

165 That is, Aberdeen, Bath, Birmingham, Bromley, Central, Herts, Croydon, Edinburgh, Exeter, Guernsey, Oxford, Plymouth, Tyneside.

166 Source: http://www.nfcg.org.uk/

167 These are available at: http://www.nfcg.org.uk/magchoic.htm

sample of 40). We have therefore not investigated this information source any further.[168]

[168] The NCF's website also houses regional consumer groups' newsletters, which contain stories about key consumer issues. These are available at: http://www.nfcg.org.uk/groups.htm However, as with *Consumer News*, collation would be a labour intensive exercise in return for a sparse amount of data.

Consumer Support Networks

1.188 Local trading standards departments, Citizens Advice and a number of independent consumer advice agencies form what is known as Consumer Support Networks.[169] The objective of the forum is to share information across consumer groups. One of the initiatives of the network is a quarterly newsletter *Getting Connected,* which contains details about the activities of local branches of the Consumer Support Network.

1.189 Articles within issues often refer to the activities of the Network related to common difficulties faced by consumers and/or problem sectors. For example, in a recent newsletter, the Camden Consumer Support Network reports that it has released a booklet for residents on the six most common problems consumers face in the area (i.e. car repairs, holidays, credit, faulty clothes, boilers and workmanship and mobile phones).[170] The same edition reports that the West Sussex Consumer Support Network has given more advice about door-to-door sales than any other topic. Builders, drive repairs, gardening, paving, tree surgeons, utility supplies and telephones all feature.[171]

1.190 As with the other information sources discussed above, it would be possible to collate information contained within these quarterly newsletters. However, in view of the labour intensity involved and the likely limited sample that will be extracted, we have not investigated this source any further.

Methodology

1.191 The aim of this section is to describe the methodology we recommend to derive a consumer complaint indicator for future market screening exercises. This methodology is based on the information sources and

169 Source: http://www.csnconnect.org.uk/About.asp?

170 See: http://www.csnconnect.org.uk/NewsItem.asp?token=0&Item=514

171 See: http://www.csnconnect.org.uk/NewsItem.asp?token=0&Item=516

findings described in the sections above. Broadly, the method we recommend for future market exercises is as follows:

1.192 First, collate the *Trends* complaint data for the most recent four quarters. Then sort the sector categories in order of complaint numbers, and create a list of the top 20 most frequently complained about sectors.

1.193 Second, collate the complaints received by sector-specific complaint handling organisations. At a minimum, this process should include complaints handled by the Financial Ombudsman, ABTA, Ofcom/Oftel, Energywatch, and Postwatch. Sector specific consumer bodies handling trivial volumes of complaints can be ignored for the purposes of the analysis. Estimates of consumer complaints will be detailed in annual reports for each organisation, and these reports are generally available via the Internet. Data should be collated using a consistent time period and sector classification across sources, including those used for the *Trends* data. Where possible, adopt the *Trends* sector classification scheme. Adjust the time period adopted for the *Trends* data, if need be.

1.194 Third, combine the data sets developed using *Trends* and information from the sector specific consumer bodies. Sort the sector categories in order of complaint numbers, and create a list of the top 20 most frequently complained about sectors.

1.195 Fourth, analyse and collate the complaints investigated and published by the BBC Watchdog using the *Trends* sector classification scheme. Then sort the sector categories in order of complaint numbers, and create a list of the top 10 most frequently complained about sectors.

1.196 Fifth, analyse and collate complaints posted on consumer complaint websites, maintaining the OFT sector classification system wherever possible. Target data that relate to the most recent annual period, if possible. The analysis should cover websites grumbletext.co.uk, complaintinfo.com, and clik2complaints.co.uk. The analyst should also review websites complaindomain.com, howtocomplaint.com, and carpon.org.uk. Include these websites if: (1) there are 50 or more complaints posted on the website; (2) complaints posted reflect those made over the past year; (3) complaints are formatted in a way to facilitate relatively easy collation by sector; and (4) the sector classification scheme used by the website is at least broadly comparable with the Trends sector classification scheme. Compile a top 10 sector list, as with other complaint sources.

1.197 Sixth, analyse, collate and sort complaints investigated and upheld by the ASA and the ITC (or Ofcom, whichever body investigated complaints over the most recent annual period). Maintain the OFT sector classification system, and target data that relate to the period over the past year, wherever possible. Compile a top 10 sector list for both the ASA and ITC. Combine the two lists and take a simple average of the sector category rankings. Re-sort the sector categories according to the average rank, creating a revised top ten sector list.

1.198 Lastly, combine sector lists and collate results by taking a simple average of the ranks assigned to each sector category, across information sources. Re-sort the sector categories according to the average rank, creating a revised top ten sector list.

Alternative measures of consumer complaints

1.199 Throughout this chapter we have adopted complaint volumes to indicate whether a market is working appropriately. An alternative indicator is £ spent per complaint.[172] Household expenditure data is available from National Statistics and could be used for this purpose. However, we have not adopted this measure for two reasons.

1.200 First, the consistency between OFT sector categories and the National Statistic categories is far from ideal. For example, there are no equivalent categories in the National Statistics data for a number of OFT categories (e.g. home maintenance, repairs and improvements, double glazing products and installation, a number of the financial service and holiday related categories). Many of these sectors attract high volumes of complaints, and either to omit or to aggregate the categories would result in loss of useful information.

1.201 Second, £ spent per complaint will often skew the significance of complaints. Consider the following hypothetical example. Suppose the trading standards departments receive one complaint per £100,000 spent on Steinway grands (cost £100,000) and 100 complaints per £100,000 spent on TVs (cost £500). On £ per complaint measure it appears that TVs are much more of a problem compared to pianos. However, only 50 percent of TVs sold attracted a complaint, but all the pianos sold caused a problem.

1.202 Better indicators would be the value lost per complaint or the number of transactions per complaint. However, data is simply not available to populate these measures. In the absence of such data, we have adopted complaint volumes as the relevant indicator.

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[172] We understand that the OFT has undertaken some work on this measure. In particular, we have reviewed a draft memo prepared by the OFT on consumer complaints within which the measure was discussed. We also received a spreadsheet detailing a draft calculation of the £ spent per complaint measure on 4 May 2004. We have not considered the material in the spreadsheet in detail however.

Conclusion

1.203 The volumes of consumer complaints attributable to individual sectors are a useful indicator of whether a market is working effectively. High volumes of complaints are likely to indicate that a supplier holds a degree of market power, or that there is an informal asymmetry in the market. This section has outlined our research of consumer complaint sources for their suitability in terms of the market screening exercise. It has also outlined our recommended methodology to derive a single indicator of consumer complaints, using suitable complaint sources, in order to identify the five to ten sectors attracting the most consumer complaints.

1.204 Based on complaint information from the trading standards departments, the Financial Ombudsman, ABTA, Oftel/Ofcom, Energywatch, Postwatch, BBC Watchdog, three privately maintained consumer complaint websites, the ASA and ITC, and according to the methodology outlined in this section, we have identified the following 15 sectors as the most frequently complained about sectors:

- home maintenance, repairs and improvements
- rlectricity
- decond-hand motor vehicles
- mobile phones and services
- other personal goods and services
- telecommunications exc. mobile phones
- holidays/travel agents
- upholstered furniture
- radio, TV, and audiovisual equipment etc
- personal computers and related hardware

- gas
- large white goods and major fixed appliances
- furniture (other than upholstered, nursery or garden), pictures etc
- double glazing products and installation
- other professional services.

1.205 The top ten sectors, not including utility sectors, which we have identified are:

- Home maintenance, repairs and improvements
- Second-hand motor vehicles
- Other personal goods and services
- holidays/travel agents
- upholstered furniture
- radio, TV, and audiovisual equipment etc
- personal computers and related hardware
- large white goods and major fixed appliances
- furniture (other than upholstered, nursery or garden), pictures etc
- double glazing products and installation.

Consumer organisations

Government bodies, consumer advocates and industry associations

1.206 We have identified the following organisations as being responsible for handling consumer complaints in the UK:

- Air Transport Users Council
- Advertising Standards Authority
- Architects Registration Board
- Association of British Travel Agents
- BBC Watchdog
- Citizens Advice
- Domestic Appliance Service Association
- Energywatch
- Estate Agents Ombudsman
- Financial Ombudsman Service
- Glass and Glazing Federation
- Independent Committee for the Supervision of Standards of Telephone Information Services
- Internet Service Providers Association
- Ofcom
- Postwatch

- Qualitas
- Radio, Electrical and Television Retailers' Association
- Retail Motor Industry Federation
- Society of Motor Manufactures and Traders
- trading standards departments
- WaterVoice

Consumer complaint websites

1.207 We have identified the following websites, designed to raise awareness about consumer complaints about particular companies/sectors:

- 'British Companies'[173]
- 'Carpon'[174]
- Clik2complaints[175]
- 'Complain Domain'[176]
- 'Complaint Info'[177]
- 'Grumbletext'[178]

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173 http://www.britishcompanies.co.uk/

174 http://carpon.com/

175 http://www.clik2complaints.co.uk/index.html

176 http://www.complaindomain.com/index.html

177 http://www.complaintinfo.com/

178 http://www.grumbletext.co.uk/

- 'How to complain' online[179]
- Referenceline[180]

Consumer complaint website sources

1.208 We have viewed the following websites over the course of our research of consumer complaint sources:

- Air Transport Users Council - http://www.caa.co.uk/auc/default.asp
- Advertising Standards Authority - http://www.asa.org.uk/index.asp
- Architects Registration Board - http://www.arb.org.uk/
- Association Of British Travel Agents - http://www.abta.com/benefits.html
- BBC Watchdog - http://www.bbc.co.uk/watchdog/
- British and Irish Ombudsman Association - http://www.bioa.org.uk/
- British Board of Film Classification - http://www.bbfc.co.uk/
- British Companies - http://www.britishcompanies.co.uk/
- British Standards Institute - http://www.bsi-global.com/index.xalter
- BSE Review Report - http://www.food.gov.uk/bse/
- 'Carpon' - http://carpon.com/
- Charity Commission - http://www.charity-commission.gov.uk/
- Citizens Advice - http://www.citizensadvice.org.uk/

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[179] http://www.howtocomplain.com/reports/

[180] http://www.referenceline.com/contact_us/index.htm

- Citizen Advice Bureau’s ‘Advice Guide’ - http://www.adviceguide.org.uk/
- Civil Aviation Authority / ATOL Section - http://www.caa.co.uk/cpg/atol/default.asp
- Clik2complaints - http://www.clik2complaints.co.uk/index.html
- Committee of Advertising Practice - http://www.cap.org.uk/
- Community Legal Services - http://www.legalservices.gov.uk/
- 'Complain Domain' - http://www.complaindomain.com/index.html
- 'Complaint Info' - http://www.complaintinfo.com/
- Consumers’ Association (which? online) - http://www.which.net/
- Consumer Complaints online (online service for consumers to lodge complaints to local agencies re Trading Service Standards) - http://www.consumercomplaints.org.uk/links.asp
- Consumer Direct - http://www.dti.gov.uk/ccp/cdinfo/index.htm
- Consumer Gateway - http://www.consumer.gov.uk/consumer_web/index_v4.htm
- Consumer Support Networks - http://www.csnconnect.org.uk/
- Council of Mortgage Lenders - http://www.cml.org.uk/servlet/dycon/zt-cml/cml/live/en/cml/home
- Domestic Appliance Service Association - http://www.dasa.org.uk/
- Energywatch - http://www.energywatch.org.uk/
- Estate Agents Ombudsman - http://www.oea.co.uk/
- Ethical Consumer - http://www.ethicalconsumer.org/magazine/news/newspages.htm

- European Consumers Union - http://www.beuc.org
- Financial Ombudsman Service - http://www.financial-ombudsman.org.uk/
- Financial Services Authority - http://www.fsa.gov.uk/consumer/
- Foodaware; the Consumers' Food Group - http://www.foodaware.org.uk/food/index.htm
- Food Standards Agency - http://www.foodstandards.gov.uk/
- Glass and Glazing Federation - http://www.ggf.co.uk/about.html
- 'Grumbletext' - http://www.grumbletext.co.uk/
- 'How to complain' online - http://www.howtocomplain.com/reports/
- Independent Committee for the Supervision of Standards of Telephone Information Services - http://www.icstis.org.uk/icstis2002/default.asp
- Information Commissioner - http://www.informationcommissioner.gov.uk/
- International Consumer Research and Testing Ltd. - http://www.international-testing.org/index.html
- Internet Service Providers Association - http://www.ispa.org.uk
- Medicines and Healthcare Products Regulatory Agency - Medical Devices http://www.medical-devices.gov.uk/
- Medicines and Healthcare Products Regulatory Agency - Medicines http://www.mca.gov.uk/
- National Consumer Council – http://www.ncc.org.uk/

- National Consumer Federation - http://www.nfcg.org.uk/intro.htm
- National Lottery Commission - http://www.natlotcomm.gov.uk/home/
- Ofcom - http://www.ofcom.org.uk/
- Office of Fair Trading - http://www.oft.gov.uk/
- OFGEM - http://www.ofgas.gov.uk/ofgem/index.jsp
- OFWAT - http://www.ofwat.gov.uk/
- People's Panel - http://www.cabinet-office.gov.uk/servicefirst/index/pphome.htm
- Postwatch - http://www.postwatch.co.uk/
- Qualitas - http://www.fira.co.uk/
- Radio, Electrical and Television Retailers' Association - http://www.retra.co.uk/
- Referenceline.com - http://www.referenceline.com/contact_us/index.htm
- Retail Motor Industry Federation - http://www.rmif.co.uk/
- Royal Society for the Prevention of Accidents - http://www.rospa.com/CMS/index.asp
- Scottish Consumer Council - http://www.scotconsumer.org.uk/
- Society of Motor Manufactures and Traders - http://www.smmt.co.uk/
- Trading standards - http://www.tradingstandards.gov.uk/

- WaterVoice - http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/Content/navigation-watervoice-homepage

2 INNOVATION

Introduction

2.1 In this chapter, we review potential indicators of innovation. Traditionally, the most important measures of innovation have been RandD expenditure and the number of patent applications. For both indicators, extensive data series are available from the OECD ANBERD database and from patent databases.

2.2 In addition, we discuss various 'new' indicators from the Community Innovation Survey, including the proportion of innovation active firms and turnover shares by novelty of product. Some of these indicators are intended to measure the 'output' from innovation rather than innovation inputs.

2.3 The structure of the remainder of this chapter is as follows:

- In Section 2.4 we briefly review the theoretical justification for using innovation indicators in top-down assessments of markets.
- Section 2.10 contains a review of potential empirical innovation indicators. For each indicator, we provide a description of the indicator, a discussion of potential limitations and problems; potential data sources; and, where applicable, the results of implementing the indicator.
- In Section 2.66, we provide our conclusion on the use of innovation indicators.

Theoretical Background

2.4 Alongside changes in skills and capacity intensity, innovation is one of the most important drivers of productivity growth. For example, it has been suggested that differences in innovation performance (measured as investment in RandD) may account for about a quarter of the productivity gap between the UK and the US, and about a sixth of the gap between the UK and France.[181] Innovation can lead to new products and to a more efficient production of existing products.

2.5 One of the key questions addressed by the literature is the relationship between innovation and market structure. The extensive theoretical and empirical literature on this issue has not only had to deal with the question of how both of these variables should be measured, but also the fact that this relationship is not a one-way relationship. Innovation has an impact on market structure, but the prevailing market structure may impact on innovation.

2.6 One obvious way in which innovations may affect market structure is through the system of patents, which allows innovators to reap monopoly profits to reward their innovation for a certain period of time. Certain innovation markets are also characterised by network effects, which also may lead to the creation of near monopolies if the standard around which the network operates is protected by intellectual property rights.

2.7 The implication of this is that innovation markets may be functioning well even if they perform badly on traditional indicators of market power, in that they are highly concentrated and profitable.[182] There is therefore a trade-off between static and dynamic efficiency, in that in order to encourage innovation one must accept monopoly power and hence a degree of static allocative inefficiency.

2.8 The impact of market structure on innovation is more controversial. Schumpeter (1942) argued that large firms, operating in concentrated markets, are more likely to engage in innovation. One justification for this was that RandD projects typically involve large fixed costs, which can only be recovered if sales are sufficiently large. In addition, firms

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[181] Crafts and O'Mahony (2001)

[182] The appropriate treatment of innovation markets in competition policy is discussed in further detail in the OFT Economic Discussion Paper 3 *Innovation and Competition Policy.*

with greater market power may be better able to finance RandD from their own profits.[183]

2.9 There is now a large empirical literature on the relationship between industry concentration and RandD activity, of which a useful survey is Symeonidis (1996). It is important here to distinguish between innovation **input** (expenditure on RandD) and innovation **outputs** (e.g. innovative products). In regard to innovation inputs, a number of authors have found a positive relationship between concentration and inputs, while others have failed to establish any such relationship. However, the picture is clearer in regard to innovation outputs: the impact of concentration on innovative output has generally been found to be either non-significant or negative.[184] This may be related to the possibility that small firms are more efficient in their RandD spending than large firms.[185] It has also been suggested that RandD spending may be unnecessarily duplicated in concentrated, oligopolistic markets.[186]

Empirical Indicators of Innovation

Empirical indicator: RandD expenditure to sales

Description

2.10 RandD expenditure (expressed as a percentage of sales) is one of the most commonly used indicators of innovation. Data on RandD expenditure across sectors and countries have been regularly collected, notably by the OECD whose staff have spent considerable efforts in harmonising international data collection.

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[183] It should be noted however that there is no necessary linkage between concentration and market power. As pointed out by Demsetz, high concentration may result from the superior efficiency of a small number of firms.

[184] Examples of studies where either a non-significant or a negative relationship has been found include Williamson (1965), Allen (1969), Acs and Audretsch (1988) and Koeller (1995).

[185] Vossen and Nooteboom (1996)

[186] Saarenheimo (1994)

2.11 Although data on RandD expenditure are available both by sector and by country, we do not consider that any conclusions on whether markets work well can be drawn on the basis of comparisons of RandD expenditure between different sectors. RandD expenditure will inherently show substantial differences between sectors, since innovation is more important in some sectors than in others. Moreover, RandD expenditure is only one input into the innovation process (other inputs may be product design, market analysis, trial production etc.). The share of RandD in total innovation expenditure differs across sectors and is typically higher in manufacturing than in services.

2.12 In view of the above, we will focus on international comparisons of RandD expenditure in a given sector.

Data sources

2.13 The database to be used for international comparisons of RandD expenditure across sectors is OECD's STAN/ANBERD database. The ANBERD database contains data on RandD expenditures, whereas data on turnover can be extracted from the STAN database.

2.14 The level of disaggregation in the STAN/ANBERD database is equivalent to the 4-digit SIC level for most manufacturing industries, but only to the 2-digit SIC level for service industries.

2.15 In addition, some comparisons of RandD expenditure between major UK and foreign companies can be undertaken on the basis of the data contained in the DTI Research and Development Scoreboard.[187] This database contains the top 700 international companies and the top 700 UK companies, both measured in terms of RandD expenditure, classified by broad industry group. Covering the top companies only, this database does not provide a full picture of RandD spending across a sector. However, a comparison of how the RandD spending of top UK firms in a sector compares with that of top international firms in the

[187] Available at http://www.innovation.gov.uk/projects/rd_scoreboard/introfr.html

same sector could be of interest and in Section 2.26, we briefly report on the results of this comparison.

Implementing the RandD to sales indicator using the STAN/ANBERD databases

Methodology

2.16 We have used the 'ANBERD - RandD Expenditure in Industry (ISIC Rev.3) Vol 2003 release 01' database for our RandD expenditure data. Data on turnover have been sourced from the 'STAN database for Industrial Analysis Vol 2004 release 03'. To select data from the databases, it is necessary to follow a number of steps and below we briefly discuss each of these in turn.

Countries

2.17 Although we have initially downloaded data for all countries, it turned out that for some countries, no data was actually included. Of the remaining countries, we have selected those that we consider to be the most representative comparator countries for the UK. These are contained in Table 2.1.

Table 2.1: Countries used in the analysis

France	**Germany**	**Italy**	**Japan**	**United States**

Currency (ANBERD)

2.18 In ANBERD, it is possible to retrieve data both in millions of national currency and in millions of current PPP dollars. It is necessary to select millions of national currency since this is also the base of the turnover figures in the STAN database. It should be noted however that the turnover values for Japan and South Korea in the STAN database are in *billions* (rather than millions) of national currency. The values for these two countries in the ANBERD database are still in millions of national currency.

Variable (STAN)

2.19 We have used the 'Production' variable (which is expressed in value terms) as a proxy for turnover.

Industry

2.20 Because of differences in the level of disaggregation between the STAN and ANBERD databases, only a number of sectors for which matching RandD and turnover data are available can be analysed. In addition, there are a number of sectors for which no UK RandD data are contained in the database. This leaves a total of 25 sectors for which international comparisons of RandD to turnover ratios can be made, shown in Table 2.2

Table 2.2: Industry sectors for which international RandD comparisons can be made using the OECD STAN/ANBERD databases

Coke, refined petroleum products and	Medical, precision and optical
Chemicals excluding pharmaceuticals	Motor vehicles, trailers and semi-
Pharmaceuticals	Building and repairing of ships and
Rubber and plastics products	Aircraft and spacecraft
Other non-metallic mineral products	Railroad equipment and transport
Iron and steel	Furniture; manufacturing n.e.c.
Non-ferrous metals	Recycling
Fabricated metal products except machinery and equipment	Electricity, gas and water supply
	Construction
Machinery and equipment, n.e.c.	Post and telecommunications
Office, accounting and computing	Real estate, renting and business
Electrical machinery and apparatus,	Computer and related activities
Radio, television and communication	Research and development

Note: n.e.c.: not elsewhere classified

Year

2.21 We have undertaken the analysis for 1997 to 2000, the latest year for which RandD data were available.

Results

2.22 On the basis of the data contained in the databases and our analysis, two UK sectors can be identified where RandD spending appears to be very much lower than in comparator countries. These two sectors are:

- office, accounting and computing machinery; and
- rubber and plastics products.

2.23 In addition, there are a number of sectors where RandD spending is also clearly lower than that in comparator countries, though not as low as in the two sectors mentioned above. These other sectors are:

- construction
- non-ferrous metals
- furniture, manufacturing n.e.c.[188]
- other non-metallic mineral products
- radio, television and communication equipment
- medical, precision and optical instruments.

2.24 Table 2.3 contains for these industries the RandD to turnover ratio relative to the average of a 'peer group' (France, Germany, Italy, Japan and the United States).

[188] n.e.c.: not elsewhere classified

Table2.3: UK RandD to turnover ratio relative to peer group average for Industries where UK RandD Is l*ow* 1997-2000

	1997	1998	1999	2000
Office, accounting and computing machinery	0.10	0.14	0.14	0.15
Rubber and plastics products	0.13	0.15	0.17	0.13
Construction	0.42	0.40	0.36	0.38
Non-ferrous metals	0.29	0.42	0.47	n/a
Furniture; manufacturing n.e.c.	0.48	0.32	0.48	0.30
Other non-metallic mineral products	0.45	0.52	0.55	0.43
Radio, television and communication equipment	0.43	0.49	0.53	0.61
Medical, precision and optical instruments	0.45	0.48	0.57	0.57

Source: NERA calculations using OECD STAN/ANBERD data
Note: the sectors are ranked on the basis of the 1997-2000 average score

2.25 As can be seen, in the case of the sectors 'office, accounting and computing machinery' and 'rubber and plastics products', RandD spending as percentage of sales is in the UK only about one eighth of the level seen in comparator countries. For the other industries shown in the table, this percentage is generally between a third and a half.

Implementing the RandD to sales indicator using the DTI Research and Development Scoreboard

Methodology

2.26 The full Scoreboard database is available online.[189] For the UK, a total of 32 sectors are included, whereas the international list of companies covers 27 sectors. After deleting the UK sectors for which no international equivalent is available in the database,[190] comparisons can be made for the sectors shown in Table 2.4.

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[189] Available at http://www.innovation.gov.uk/projects/rd_scoreboard/2003.csv

[190] These are insurance; investment companies; mining; real estate; and transport.

Table 2.4: Industry sectors for which international RandD comparisons can be made using the DTI research and development scoreboard

Aerospace and defence	IT hardware
Automobiles and parts	Leisure and hotels
Beverages	Media and entertainment
Chemicals	Oil and gas
Construction and building materials	Personal care and household
Diversified industries	Pharma and biotech
Electricity	Software and computer services
Electronic and electrical	Speciality and other finance
Engineering and machinery	Steel and other metals
Food producers and processors	Support services
Forestry and paper	Telecommunication services
General retailers	Tobacco
Health	Utilities - other
Household goods and textiles	

2.27 Since the 700 international companies also include UK companies, these need to be manually excluded from the database. The list of UK companies also include subsidiaries of foreign companies, but we have retained these since UK subsidiaries of foreign companies can be regarded as being part of UK markets.

Results

2.28 On the basis of our analysis, there are a number of sectors where RandD expenditure as a percentage of sales by the top UK companies appears lower than that by the top international companies in the same sector. In some cases, this may be related to low sample sizes for certain sectors in the databases. For this reason, we have excluded those sectors where less than 10 companies were included for a given sector in either the UK or the international databases. After this adjustment, a total of seven sectors remain, shown in Table 2.5.

Table 2.5: UK top firms RandD to turnover ratio relative to international top firms for industries where UK RandD is low, 2002

	2002
Support services	0.28
Oil and gas	0.40
Electronical and electrical	0.43
Construction	0.46
Chemicals	0.50
Household goods and textiles	0.54
Engineering and machinery	0.55

Source: NERA calculations using DTI Research and Development Scoreboard data

2.29 A comparison of the results from the OECD STAN/ANBERD databases, shown in Table 2.3, with those from the DTI RandD Scoreboards shown above is difficult as the two data sources employ different industry classifications. There are however some similarities, for example in the chemicals (rubber and plastics), construction and machinery sectors.

Limitations

2.30 The most important problem with RandD expenditure as an indicator of innovation is that RandD only serves as an *input* to the innovation process. RandD may or may not lead to inventions, which in turn may or may not lead to actual market innovations.

2.31 It has been well documented that *research productivity*, as typically measured by the ratio of patents to RandD, has declined sharply over the last 40 years.[191] This may be the result of several factors, including:

- **Demand growth**: as markets expand, the returns to RandD increase. This causes higher levels of RandD investment, leading to a fall in research productivity due to diminishing returns in what may be referred to as the 'knowledge production function'.

[191] Lanjouw and Schankerman (2004)

Empirical studies have typically shown that market size does matter [192]

- **Technological exhaustion**, leading to fewer innovations for any level of RandD investment.

2.32 Although research productivity has generally been declining, the pattern of change has shown large differences across industries and firms. There may also be differences between countries to the extent demand growth has differed across countries.

2.33 The problems with the RandD expenditure measure as an indicator of innovation have been illustrated in a comparative study of innovation indicators by Kleinknecht *et al.*[193] The study found that there was very little correlation between RandD expenditure and other, more output-related indicators of innovation, such as the number of patent applications, the sales of products new to the firm, or new to the market. Each of these indicators turned out to be virtually unrelated to the other indicators examined. However, as we will also discuss below, output-related indicators of innovation themselves are subject to considerable measurement problems.

Empirical indicator: number of patents to sales

Description

2.34 The number of patents relative to sales can be regarded as an intermediate indicator of innovation. It is the result of, among other things, RandD expenditure and can be regarded as one of the outputs of the 'inventive activity' of a firm. However, since not all patents are in practice put into commercial use, the number of patents cannot be regarded as a final output measure of innovation.

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[192] Ibid.

[193] Kleinknecht, Van Montfort and Brouwer (2000)

2.35 Full data are available on patents since all of them are by their very nature registered. Patent databases are publicly available and offer long time series.

Limitations

Fundamental problems

2.36 The use of patent data as indicator of innovation is subject to a number of problems. These include the fact that not all innovations result in patents, the fact that the propensity to patent may differ between industries and the fact that not all patents are equally significant. But while these shortcomings have important implications for any comparisons across industries, they appear to be less serious for comparisons across countries.

2.37 There is a however a more important fundamental problem associated with the use of patent data as indicator of innovation in international comparisons. A patent essentially confers the right to stop others from making, using or selling an invention *in a particular country* for a limited period of time. Since national patent offices do not generally have jurisdiction over other countries (except for example within the European Union), it is necessary to file patents in every country where protection is sought.

2.38 The implication of this is that the number of patents filed in, for example, the UK does not necessarily reflect the extent of innovative activity in UK markets. One way of dealing with this problem could be to undertake an analysis solely on the basis of home applicants for patents (e.g. UK firms in the UK), though this ignores the presence of other foreign firms that do account for innovation in UK markets.

Practical/data problems

2.39 The most significant practical problem associated with the use of patent data in top-down assessments of whether markets are working well is related to the way in which patents are classified.

2.40 Traditionally, there have been two main approaches to classifying patents. These are:

- The *industry-oriented* approach, involving classifying patents or other innovations to the industry sectors to which they are characteristically relevant

- The *function-oriented* approach, involving classifying patents to the functions characterising them.

2.41 In practice, many classification schemes are to some extent a mixture of these two approaches. Certain patents are intrinsically linked to particular industries so that it is natural to classify them under the relevant branches. For example, spinning, weaving and knitting are strongly related to the textile industry and can be classified under this heading. But inventions related to storing, lifting and hauling, for example, can be employed in a large variety of industries.

2.42 The industry-oriented approach has been used in the past by for example the German Patent Classification. But the system employed by the UK Patent Office is largely function oriented. This also applies to the International Patent Classification (IPC).

2.43 The UK classification key, which to some extent follows the IPC, is summarised in Table 2.6. The table contains the eight main categories in the classification and some examples of subclasses within each main category.

Table 2.6: UK Patent classification key

Section	Name	Examples of	
A	Human necessities	A2B	Food preparations
		A5B	Pharmaceutical
B	Performing	B3F	Casting metals
		B8E	Loading and unloading
C	Chemistry,	C2V	Vitamins
		C4P	Dyes and pigments
D	Textiles, paper	D1G	Sewing
		D2A	Paper-making apparatus
E	Civil engineering,	E1G	Rail and road ways
		E1R	Glazing
F	Mechanics, lighting,	F1Q	Power plant
		F4R	Lamps
G	Instrumentation	G2L	Flashbulbs
		G5R	Recording and playback
H	Electricity	H1N	Electric switches
		H4B	Optical communication

Source: UK Patent Office

2.44 As can be seen in the table, there are some categories in the patent classification system that are more or less related to a particular industry, for example 'pharmaceuticals preparations'. But in the case of most categories, there is no or only a weak link to a particular industry. And even where there is a link to a particular industry, there is still the possibility that particular innovations by that industry are classified in a different category. For example, the pharmaceutical industry would not only produce innovations related to 'pharmaceutical preparations' but could also produce innovations in the 'vitamins' field.

2.45 Given that patent data are not available at the industry level, we do not consider them to be a useful indicator for use in top down assessments of whether markets are working well. Consequently, we do not further consider this indicator.

Empirical indicators from the Community Innovation Survey

Introduction

2.46 The Community Innovation Survey (CIS) is a large scale survey that aims to monitor Europe's progress in the area of innovation. It was carried out for the first time in 1992 and repeated in 1996 and 2001.

2.47 The data are collected by national authorities using a common methodology and processed by Eurostat. To preserve the secrecy of firm-level information, data at the microlevel remain confidential and can only be accessed by Eurostat staff.

2.48 At the time of writing the present report, the results of the 2001 CIS were not yet available. We have however been informed that international comparisons of CIS indicators will be published for the industry sectors contained in Table 2.7.

Table 2.7: NACE codes for which international CIS comparisons will be available

NACE code	Description
C	Mining and quarrying
D	Manufacturing
E	Electricity, gas and water supply
G	Wholesale and retail trade; repair of motor vehicles, motorcycles
H	Hotels and restaurants
I	Transport, storage and communication
J	Financial intermediation
K	Real estate, renting and business activities

2.49 Since the CIS data for these sectors will not further be disaggregated, their usefulness in top-down analyses of individual markets will be limited. In addition, being derived from surveys, they may not be fully reliable. For example, firms may interpret questions related to 'turnover shares from new or improved products' in different ways and will often make rough estimates.

2.50 In the subsections below, we briefly discuss each of the CIS indicators. Like with all other innovation indicators, we believe that in the context of top-down assessments of markets, they can only be usefully employed in international comparisons.

Percentage of innovation active firms

2.51 In the CIS analyses, innovation active firms are defined as firms having introduced new or improved products or processes, engaged in longer-term innovation activity etc. It is in fact a combination of a number of more specific innovation measures.

2.52 The indicator is a mixed indicator in that it captures both input and output related dimensions of innovation. From a theoretical perspective, this may be undesirable. However, given that both innovation inputs and outputs are difficult to measure, a combined indicator might in practice actually be somewhat more reliable.

2.53 For the indicator to be producing meaningful results, it is necessary for it to be weighed using business weights. The results could otherwise be heavily influenced by the presence of fringe firms in a market (of whom there may be many) who may not be innovation active at all. The need to weigh the results also applies to the other CIS indicators that we will discuss below.

Percentage of firms with product or process innovation

2.54 This indicator consists of the following four subindicators:

- percentage of firms with product innovation
- percentage of firms with novel product innovation
- percentage of firms with process innovation
- percentage of firms with novel process innovation.

2.55 The distinction between 'product' and 'novel product' is related to the question whether new products are new to the firm ('product') or new to the market ('novel product'). In the CIS questionnaire, 'market' in this context is defined as 'your enterprise's market'.

2.56 In addition, a distinction is made between product and process innovation. The CIS questionnaire defines process innovation as 'the use of new or significantly improved technology for production or the supply of goods and services'. It does not include purely organisational or management changes.

2.57 Since the CIS asks firms whether new or improved products or processes were *introduced*, this group of innovation indicators can be interpreted as output based indicators of innovation. As such, they are useful, although subject to considerable measurement problems. In addition, as we will see below, they do not measure whether particular products or processes that have been introduced have become *successful*.

Shares of turnover by novelty of product

2.58 Like the previous group of indicators, sales from new products can be regarded as an output indicator of innovation. But introducing new products or processes does not guarantee that these will be successful. The share of sales measures a final output of innovative activity since it will be higher for firms that have introduced innovative products that have been successful in the marketplace. It does not however take account of other final outputs of innovation, such as successful process innovation (and consequent productivity gains).

2.59 Products may, as noted above, be new to the firm or new to the market. The CIS takes this distinction into account by having the following two indicators:

- share of turnover from new or improved products (new to firm)
- share of turnover from novel products (new to market).

2.60 Although the second indicator is the purest indicator of innovation, the first indicator is equally important. If a particular innovative market is working well, this may actually mean that competitors need to catch up with innovations as soon as they can. In addition, unlike the second one, the first indicator also includes *improved* products.

2.61 These two problems are subject to interpretation and measurement problems in the same way as the other CIS indicators are. Nevertheless, in international comparisons, they could be of interest as truly output-based indicators of innovation.

Percentage of firms citing organisational change

2.62 In the CIS, this indicator is broken down into the following subindicators:

- change in corporate strategy
- advanced management techniques
- new organisational structures
- change in market strategy.

2.63 Organisation change in firms may be related to innovation. For example, it may be that the introduction of a major new product is accompanied by a reorganisation of the company's organisational structure. But organisational change may also come about as a result of changes unrelated to innovation, such as cost reductions.

2.64 The percentage of firms citing organisational change is in view of the above probably only weakly related to the innovative activity in firms. But in top-down assessments of markets, the indicator may be of more general use. High levels of organisational change would normally be associated with well functioning markets. If UK firms in a particular sector consistently display lower levels of organisational change than foreign firms in the same sector, this could be of concern even if the differences are not innovation-related.

2.65 As with the other CIS indicators, the indicators relating to organisational change are subject to interpretation problems. Concepts like 'change in corporate strategy' and 'advanced management techniques' are rather vague and can be interpreted in a variety of ways.

Conclusion

2.66 In this chapter, we have reviewed the following three main innovation indicators:

- RandD expenditure to sales
- number of patents to sales
- indicators from the Community Innovation Survey (CIS).

2.67 In the context of top-down assessments of whether markets are working well, all of these are only useful when compared to international comparator companies that are active in the same sector.

2.68 We do not recommend the use of patent data for top-down assessments of markets since patents are not classified by industry.

2.69 Both the remaining two groups of innovation indicators suffer from the problem that they are not available at a very disaggregated level. The international comparisons of data from the Community Innovation Survey (CIS) in particular will only be available at the level of aggregate NACE groups and will not be very helpful for the purpose of identifying individual sectors. They also suffer from considerable measurement and interpretation problems. Some of them do however relate to the output of innovation and could as such be of interest if more disaggregated data became available.

2.70 At this stage, the only innovation indicator we recommend is the RandD expenditure to sales ratio. This indicator is subject to its own problems and is only available at the 2-digit level, but more detail is available for some industries. Data for this indicator are compiled by the OECD and are as such suitable for international comparisons. Further insights can be gained from the DTI Research and Development Scoreboard.

2.71 However, given the problems associated with this indicator, we recommend that only a low weight be attached to it in the overall assessment.

3 SWITCHING COSTS

Introduction

3.1 In this chapter, we review empirical indicators of switching costs. We consider actual switching behaviour; comparisons of purchasing behaviour between existing and new customers; comparisons of prices charged to existing and new customers; and customer perceptions of switching costs.

3.2 We also review the 2000 DTI study *'Switching Suppliers'*, in which customer perceptions of switching costs as well as actual switching behaviour were studied in selected markets.

3.3 The structure of the chapter is as follows. In Section 3.4 we outline the theoretical basis of using switching costs as an indicator in top-down assessments of markets, Section 3.14 reviews empirical indicators of switching costs, and Section 3.50 concludes.

Theoretical basis of using switching costs as an indicator[194]

3.4 Switching costs can be defined as the real or perceived costs that are incurred when changing supplier but which are not incurred by remaining with the current supplier. Switching costs can take the following forms:

- transaction costs, e.g. changing bank details
- compatibility costs, e.g. between razors and razor blades
- learning costs, e.g. of getting familiar with a complex technology product
- contractual costs, where switching costs are created by firms themselves (e.g. through frequent flyer programmes)

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[194] The present section is based on the OFT Economic Discussion Paper 5 '*Switching Costs*', prepared by NERA for OFT and DTI in 2003. We refer to this paper for a fuller discussion of the economics of switching costs.

- uncertainty costs, associated with moving to an untested product

- psychological costs, associated with moving away from a relationship based on trust.

3.5 In the presence of switching costs, firms can charge higher prices to their existing customer base than otherwise would have been the case, since customers incur a cost if they switch to another supplier. But given that this renders the existing customer base 'valuable', this creates an incentive for firms to compete fiercely for new customers.

3.6 The following pricing structures are associated with switching costs:

- **Bargain then rip-off pricing.** Given the fact that existing customers are valuable, firms price low to attract them and then raise prices once customers are 'locked in'. This does not imply that prices to existing customers are excessive, since prices could be normal over the product life-cycle if *ex-ante* competition is sufficiently strong. There are however instances where this does not fully hold, for example in the presence of uncertainty, risk-averseness, liquidity constraints or weak ex-ante competition. If one of these applies, switching costs are likely to increase the average price level.

- **Firms may price differently according to market share.** When price discrimination is not possible, firms with high market shares may find it more profitable to 'harvest' existing customers than to price low in order to attract new customers. The opposite will apply to firms with low market shares. But when firms can engage in price discrimination, they will simply price low to new customers and high to existing customers, irrespective of their market share.

- **Intense competition in start-up markets***.* In fast-growing markets with many new customers, competition is likely to be intense in the presence of switching costs. By contrast, in mature markets with few new customers, switching costs may dampen competition.

3.7 Switching costs can also have a number of other impacts on the nature of competition in a market. In mature markets with high switching costs, *entry* can become more difficult. However, moderate switching costs can actually stimulate entry as incumbents in such markets may fight less aggressively to prevent new entry if their customers are to some extent locked in.

3.8 In regard to the scope for *collusion* in a market, the impact of switching costs can either be positive or negative. To the extent switching costs reduce the extent of competition in mature markets, they may make collusion less likely as the additional gains from collusion in such a market may be limited. But switching costs may make any collusion that does occur more sustainable. The reason for this is that the large price cuts that are necessary to induce customers to switch suppliers in the presence of switching costs can be easily observed by competitors.

3.9 In some cases, switching costs can have benign effects on **innovation** in a market. The lock-in effects created by switching costs can act like a patent, providing protection for the rewards arising from risky investment in innovative products or services.

3.10 In markets where firms benefit from switching costs, it may make sense for firms in that market to create or increase them, for example through offering loyalty rebates or locking in customers by contractual means. When practiced by firms that are dominant, such schemes can potentially have exclusionary effects.

3.11 On the basis of the above, it can be concluded that whereas switching costs affect the nature of competition in a market, they do not **necessarily** make markets less competitive. They may mollify competition in mature markets but this may have been compensated for by aggressive **ex-ante** competition. In growing markets, switching costs may actually intensify competition.

3.12 Nevertheless, switching costs do have the potential to weaken competition in a market. Under certain conditions, they may raise average price levels. Moreover, dominant firms may be able to create or increase switching costs if they benefit from them, which may have exclusionary effects.

3.13 In view of this, we consider that switching costs are in principle a useful indicator for the top-down assessments of markets. If switching costs in a particular market are very high, this might be one of the factors on the basis of which the market could be subjected to a more detailed investigation.

Empirical indicators of switching costs

Introduction

3.14 Switching costs can be measured in a number of ways, including relatively simple non-econometric methods and more data-intensive econometric methods.

3.15 Non-econometric approaches to estimating switching costs include the following indicators:

- actual level of switching
- comparing choices made by existing and new customers (in markets without price discrimination), and
- comparing prices charged to existing and new customers (in markets with price discrimination).

3.16 It is also possible to estimate switching costs using econometric techniques. The two principal approaches are the following:

- **Direct estimation using choice modelling**. Choice modelling is a technique with which preferences of individual customers can be determined. Customers are asked to make trade-offs using different product attributes. Switching costs can be measured either by directly introducing them as an attribute (for example a frequent flyer programme) or by comparing preferences of current and new customers.
- **Indirect estimation**. This can be done either by estimating firm-level elasticities (if these are low, this could indicate the presence of

switching costs) or by estimating the impact of a change in switching costs (for example the introduction of number portability in the mobile telephony market) on prices or profit margins.

3.17 Since econometric methods are very data intensive, we do not consider these to be suitable for the top-down analysis of markets (though they could be employed in subsequent more detailed investigations of particular markets).[195]

3.18 In the remainder of this chapter, we focus on non-econometric approaches to estimating switching costs. Each of the three potential approaches identified above will be discussed in turn in Sections 3.20 to 3.30.

3.19 Another possibility is simply to ask customers what they believe switching costs in a particular market are. This was done by the Department for Trade and Industry in a study undertaken in the year 2000.[196] We review this study and the indicators used in it in Section 3.34.

Empirical indicator: actual level of switching

3.20 One of the more easily observable indicators of switching costs across industries is the actual level of switching. Whereas data on this are not as such contained in cross-industry databases, they can relatively easily (though not necessarily cheaply) be obtained using consumer surveys.

3.21 The actual level of switching is normally defined against a particular time horizon. Customers may, for example, be asked whether they have switched suppliers in the last five years.

3.22 However, a problem with this indicator is that the actual level of switching is not a perfect indicator of the extent and importance of switching costs. Markets with low levels of switching costs do not necessarily have high levels of switching, and **vice versa**. For example:

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[195] We refer to Annexe B to the OFT Economic Discussion Paper 5 '*Switching Costs*', prepared by NERA for OFT and DTI, for a detailed treatment of the use of econometric techniques to estimate switching costs

[196] DTI (2000) *Switching Suppliers.* Consumer Affairs Report Series Executive Summary No. 2.

- Switching levels may be low because prices may adjust to prevent customers from switching, even if switching costs are low.

- In markets where firms can price discriminate between existing and new customers and switching costs are high, existing customers may still switch in order to benefit from low prices available to new customers. This can result in high switching levels in markets with high switching costs.

3.23 The DTI 'Switching Suppliers' study considered actual switching levels alongside more direct indicators of switching costs, and as such provides some interesting insights into the relationships between the various indicators. We review the study in Section 3.34.

Empirical indicator: choices by existing and new customers

3.24 Another potential indicator of switching costs can be derived by examining differences in choices made by existing and new customers.

3.25 In markets without switching costs, choices made by existing and new customers can be expected to be similar to each other. If on the other hand existing customers choose differently than new customers, this may mean that switching costs prevent existing customers from taking advantage of the offers available to new customers.

3.26 The indicator cannot be applied in markets with price discrimination between existing and new customers. In such markets, existing and new customers do not base their choices on the same offers. But in these markets, a comparison of prices between existing and new customers could be of interest (see Section 3.34 below).

3.27 It should be noted that existing and new customers may make different choices even in the absence of switching costs. If the groups of existing and new customers have different characteristics or different preferences, a simple comparison of their purchasing patterns will not be suitable for identifying the presence of switching costs.

3.28 Another disadvantage of this indicator is that while it suggests the potential **presence** of switching costs in a market, it will only very crudely indicate the *level* of these. A top-down analysis would, for example, involve comparing the differences in choices made by existing and new customers in a given market to those in another market. But while switching costs may account for some of any differences in the patterns between the two markets, there are also many other factors that would impact on this such as the actual products sold, prices charged etc.

3.29 Because of the data requirements that this indicator imposes, we do not consider it suitable for use in top-down assessments across markets. It is however a potentially useful indicator for use in more detailed investigations of individual markets.

Empirical indicator: prices charged to existing and new customers

3.30 As noted above, a comparison of the purchasing patterns of existing and new customers will not be indicative of switching costs in markets where existing and new customers do not face the same prices as a result of price discrimination.

3.31 In such markets, a comparison of the prices charged to existing and new customers may indicate the presence of switching costs. In the absence of switching costs, such price discrimination would not be possible.

3.32 Like the previous indicator, a comparison of prices charged to existing and new customers may indicate the **presence** of switching costs, not necessarily the level of them.

3.33 Given the data that are required to implement this indicator, we do not consider it to be a suitable indicator in top-down assessments of markets. But like comparisons of purchasing patterns between existing and new customers, it may be a useful indicator for more detailed investigations of individual markets.

Empirical indicator: customers' perception of switching costs

Introduction

3.34 In 2000, a study into the barriers that customers face when switching suppliers was commissioned by the Consumer Affairs Directorate of the Department for Trade and Industry (DTI). In the study, switching costs were measured by directly asking customers what they thought switching costs in a particular markets are, as well as on the basis of some other indicators.

3.35 The study used a variety of techniques, including 1,000 quantitative questionnaires, a number of in-depth interviews and mystery shopping.

3.36 Although the study considers switching costs across industries, its coverage is limited since only a small number of markets was included. These are:

- energy (electricity/gas)
- fixed line telephones
- mobile telephones
- insurance (home insurance/car insurance)
- banking (current accounts/savings accounts), and
- mortgages.

Indicators used

3.37 In the published study report, results are reported for a variety of indicators. These can be grouped into the following categories:

- expected switching costs indicators
- actual switching costs indicators

- expected switching **benefits** indicators, and
- switching behaviour indicators.

Of these, the switching benefits indicators are not directly related to switching costs. We nevertheless report the results of these indicators as they provide some interesting insights into the relationships between the other indicators.

Indicators of expected and actual switching costs

3.38 A number of indicators in the DTI study can be regarded as direct indicators of the level of switching costs in a particular market. These are:

- expectations of ease of switching
- expectations of expenses incurred through switching, and
- switchers' experience of switching.

3.39 There is an important distinction between these indicators in that the first two relate to the **expected** level of switching costs, while the last one is an indicator of the **actual** level of switching costs. In terms of the assessment of markets, it is ultimately the expected level of switching costs that is relevant, since this is what customers will base their decision on. If actual switching costs are lower than expected switching costs, public policy could aim to better inform customers so as to create more realistic expectations.

3.40 In regard to expected switching costs, the two indicators used also distinguish between the ease of switching and the expenses to be incurred, in other words between the monetary and non-monetary costs of switching.

3.41 Table 3.1 contains the results of the three indicators for each of the industries included in the study. For each indicator, respondents could choose between three or four response categories, for example very easy/fairly easy/not easy/don't know. The table shows the proportion of respondents providing answers consistent with moderate or high switching costs.

Table 3.1: Expected and actual switching costs indicators in DTI 'switching suppliers' study

Category	Indicator	Response	Percentage of respondents					
			Energy	Fixed line telephones	Mobile phones	Insurance	Banking	Mortgage
Expected switching costs	Expectations of ease of switching	Fairly easy/ not easy	46	51	43	42	53	68
	Expenses to be incurred through switching	Slightly more/ significant extra	14	19	36	19	20	54
Actual switching costs	Switchers' experience of switching	Fairly easy/ not easy/ not at all easy	25	33	23	17	59	34

Source: DTI (2000).

3.42 Of the six markets surveyed, mortgages is perceived to be the most difficult market to switch in, both in terms of the expected monetary and non-monetary costs. The differences between each of the five other markets are relatively limited, though respondents in mobile telephony markets expect to incur higher expenses when switching in the market for mobile phones than in other markets.

3.43 However, the table also shows that expected switching costs are only in part reflected in the actual difficulties that people experience. In mortgages, where 68 per cent of respondents expect that switching will not be easy or only fairly easy and 25 per cent think that additional expenses will be incurred, only 34 per cent of those that actually have switched reported difficulties. In banking, switchers' experience of switching more closely matches people's expectations. In other sectors, actual switching also tends to be considerably easier than people expect. Of the six markets, actual switching is most difficult in the banking sector.

3.44 The differences between expected and actual switching experiences suggest, among other things, that there may be some interpretation problems with these indicators. For example, customers' expectations of the ease of switching between mortgages may to some extent have been influenced by the redemption fees payable, even if this was the subject of a separate question. On the other hand, the positive experience that most people actually appear to have had in terms of the *ease* of switching between mortgages may not have taken into account the fees that had to be paid.

Indicators of expected switching benefits

3.45 Switching benefits are distinct from switching costs. However, they are informative because they illustrate some of the difficulties in the relationship between switching costs and actual switching behaviour, which we will review in the next subsection.

3.46 The perceived switching benefits in each market are shown in Table 3.2. The table contains the proportion of respondents in each market indicating that major savings are expected to be made by switching.[197] On the basis of these responses, the potential benefits from switching are highest in the insurance and mortgage markets. These results are to some extent mirrored in the indicator whether people would switch if it were easy and free to do so (people would do so if there were benefits from switching), though the differences between the various markets are much smaller here.

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[197] All the markets studied in the DTI study offer more or less homogeneous products. If the products in a market are not homogenous, the switching benefits would need to be adjusted for quality differences.

Table 3.2:- Expected switching benefits indicators in DTI 'switching suppliers study'

Category	Indicator	Response	Percentage of respondents					
			Energy	Fixed line telephones	Mobile phones	Insurance	Banking	Mortgage
Switching benefits	Expected savings to be made through switching	Major	9	9	10	23	10	34
	Whether would change if easy and free to do so	Yes, definitely	16	16	14	18	10	22

Source: DTI (2000).

Indicators of actual switching behaviour

3.47 In Section 3.20 above, we have already reviewed the suitability of data on actual switching behaviour as an indicator of switching costs in a market. We have seen there that caution is required and that actual switching behaviour should not be used on its own as an indicator of switching costs.

3.48 Table 3.3 contains the data on actual switching in each market from the DTI study.

Table 3.3: Proportion of consumers switching in the period 1995-2000

Category	Indicator	Response	Percentage of respondents					
			Energy	Fixed line telephones	Mobile phones	Insurance	Current account	Mortgage
Actual switching behaviour	Proportion switched in last five years	-	Electricity:37 Gas: 26	25*	22**	Home:30 Car: 53	6	12

Source: DTI (2000). Notes:

* *In the study, an anomalous switching percentage in the fixed telephony market of only 11 was found due to an overrepresentation of BT customers in the sample. The figure of 25 per cent is an OFTEL figure quoted in the study.*

** *Figure obtained through slightly different sequence of questions.*

3.49 The following points are worth noting:

- Switching levels are highest in the insurance market, particularly car insurance. In the preceding tables, we have seen that the insurance market has high perceived savings from switching, but that switching costs in this market are similar to those in most other markets. Some of the switching in the insurance market may be due to people moving house or buying a new car.

- In the various energy and telecoms markets, switching levels are also relatively high, but generally lower than in the insurance markets. These markets have switching costs comparable to most other markets in the study, with the exception of the mobile phone market where a relatively high percentage of respondents expects additional expenses. The savings from switching in these markets are relatively low. The mobile phones example illustrates that there is no simple link between switching costs and actual switching.

- Low switching levels are seen in the financial markets included in the study. We have seen that these markets also have the highest switching costs, either in monetary or non-monetary terms. But whereas the potential savings from switching in the banking markets are low, in the mortgage markets these are actually the highest of all sectors. However, it would appear that the benefits from switching in this market are outweighed by the costs of doing so.

Conclusion

3.50 In this chapter, we have reviewed the following potential indicators of switching costs:

- actual level of switching
- choices made by existing and new customers (in markets **without** price discrimination between existing and new customers)
- prices charged to existing and new customers (in markets **with** price discrimination between existing and new customers), and
- customers' perception of switching costs.

3.51 The two indicators 'choices made by existing and new customers' and 'prices charged to existing and new customers' mainly provide an indication of **whether** switching costs are likely to be present in a particular market. They cannot be used to compare the **level** of switching costs across markets since it is difficult to control for other factors impacting on choices made by, or prices charged to, existing and new customers. In addition, data on these indicators does not exist on an aggregate level and would need to be compiled market by market. In view of this, we do not consider these indicators suitable for top-down analyses of markets.

3.52 The 'actual level of switching' indicator is not a perfect indicator of the extent of switching costs. But we believe that as a **prima facie** indicator, this indicator is potentially useful. Actual data on some sectors are available from the DTI study, but unfortunately the coverage of this study is limited.

3.53 Switching costs as perceived by customers are highly relevant since it is on the basis of these perceptions that customers will ultimately make their decisions. Some data regarding perceived switching costs are available from the 2000 DTI study on switching costs, but as noted above this only covers a very limited number of markets. In addition, some of the indicators may be subject to interpretation problems.

3.54 In principle, our preferred approach would be to use the actual level of switching in combination with customers' perceptions of switching costs.

3.55 However, given that a study on these indicators with wide sectoral coverage does not presently exist, we do not actually recommend switching costs as an indicator in top-down assessments of whether markets are working well. But we suggest that the above combination of indicators is used in any in-depth investigation of particular markets.

4 INFORMATION INDICATORS

Introduction

4.1 This chapter summarises our search for indicators which attempt to capture the extent to which consumers suffer from informational disadvantages when deciding what product to purchase. These informational disadvantages are of concern if they lead to consumers getting a worse or less appropriate deal than would be possible in a full information competitive market. There are two main sorts of informational asymmetry a consumer might be under: ignorance of prices or quality. A lack of information on the prices which are being charged in the market can lead to higher average prices and possibly also price dispersion with some consumers getting a less advantageous price than others. A lack of information as to the quality or closeness of match to requirements of the product being purchased can lead to consumers buying inappropriate amounts or types of a good. Both of these effects can lead to consumer detriment as consumers could have secured a more advantageous deal for themselves if they had fuller information.

4.2 If a consumer faced no search costs then they could costlessly rectify any informational asymmetries and make an informed choice. We therefore begin this chapter by exploring the theory around search costs. The presence of search costs leads to the information asymmetry and hence imperfect information for the buyer. The OFT research brief identified six potential indicators for consumer detriment under imperfect information. The indicators suggested were:

- focal points of competition
- commission payments
- infrequent purchases and credence goods
- bundling and aftermarkets
- complex products
- price dispersion

4.3 This chapter analyses each of these in turn, with one slight modification; price dispersion is considered as part of the more general effects of consumer search costs. We first briefly explore the theory behind each of the above indicators and what effect it might be expected to have on competition. Secondly we try to capture any possible data sources to allow a test based on the indicator to be formulated.

Search Costs

The relevance of search costs to competition and consumer welfare

4.4 In markets where consumers have full information as to the price and characteristics of all the suppliers' products, the consumer can choose the product which will generate the most utility. However, typically consumers will have to engage in some search activity to acquire all of this information. The search process is costly in terms of effort, and possibly in terms of cost also where travel is required for instance.[198] It is the presence of the search costs which leads to the imperfect information held by buyers. The presence of this imperfect information can lead to consumer detriment in the following ways.

Price uncertainty and consumer detriment

4.5 In general, theory predicts that when consumers have search costs which prevent them determining the prices of products, prices will on average be higher than in the absence of search costs. In addition, price dispersion will result in some, but not all, circumstances. These model predictions follow whether all consumers have the same level of search costs, or if search costs differ between consumers. The theoretical mechanism by which prices rise does depend on the nature of the search costs however.

198 In addition the opportunity cost of the time taken must also be considered.

4.6 If consumers differ in their search costs, then Salop and Stiglitz (1977) and Stahl (1989) have shown that some firms will price low to attract the informed customers (the ones who find acquiring product information costless), whilst other firms price high and sell to those customers who do not shop around – that is price dispersion will result.[199] The presence of search costs therefore causes those consumers who don't search to pay a higher price for the same good. In Stahl's analysis, the fewer informed consumers there are, the more all prices tend towards the monopoly price, and so the extent of any price dispersion diminishes – though average prices are certainly high.[200]

4.7 If consumers do not differ in their search costs, Sutton (1980) has shown that price dispersion can still arise. In Sutton's model firms advertise and so consumers have incomplete information as to the prices being charged. If a firm lowers its price it can attract some more consumers, but by raising its price it can exploit its existing consumers. An individual consumer's decision to search depends on the total number of consumers and who they are currently buying from. The consumers do not all move together as the firm they moved to would raise its prices in response if its demand grew so strongly.

4.8 These theories all have search costs leading to higher prices and potentially also price dispersion. The Stahl (1989) analysis suggests that prices will always lie between a lower band of cost and an upper band at the monopoly price, and that increased search costs lead to an increase in the average price. Diamond (1971) noted that if search costs are very high there will be no price dispersion, no searching and prices will be at monopoly levels. In such cases indicators which captured profitability would identify these markets.[201] In actual fact, the indictors

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[199] Stahl (1996) suggests that some consumers like shopping and so have negative search costs (derive pleasure from searching) – this is one potential source of consumers who are fully informed in his 1989 model.

[200] Greater prices do not necessarily mean that these firms are making excess profits, as free entry would dissipate these profits amongst the many firms.

[201] Buccirossi (2003) has actually shown that search costs can cause prices for products to rise above monopoly levels. This can occur in markets such as taxis where the quantity choice is

of search cost effects proposed in OFT (2000) and Hunter et al. (2001) are essentially measures of industry profitability as against a fully competitive, no search cost benchmark.

4.9 Where price dispersion does result however, it is not clear how great a consumer detriment it causes. On the one hand there is clearly an inequity in some consumers acquiring their products more cheaply than others. However, the dispersion of prices may grow the market;[202] if only limited price dispersion were permitted then firms may choose to price high and serve those with no time to shop around thus preventing those with more limited budgets purchasing.

4.10 Possibly counter-intuitively, Anderson and Renault (1999) have shown that increased product differentiation does not exacerbate consumer detriment incurred through price dispersion when search costs are present. If products are more differentiated then consumers will need to search for the right product characteristic. This has the effect of strengthening competition and reducing price dispersion.

Price based tests for search costs

4.11 The most robust result arising from the search cost literature is that search costs cause average prices to increase away from the competitive level and towards the monopoly level. Perhaps the best indicator for this is an analysis of whether prices are 'excessive' – that is much greater than justified by average costs. A further indicator would be the level of firm profitability. The latter would be

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made upon the expected price (consumers decide whether to put themselves in the position of needing the taxi at the end of the night depending on the price they expect to be charged.) but the specific firm purchased from is chosen randomly without search. As the size of the market is only affected by the expected price, each firm finds it in its interests to increase its prices above monopoly levels. However, it is not clear that this result would continue to hold if firms develop reputations in a bid to increase their market share.

202 For example, Varian (1980) posits a model of sales in which firms lower their prices for short periods of time to attract those with time for search, whilst pricing high to make greater profits on the consumers with less time. If this practice weren't allowed then the time rich consumers would have to pay a higher price and may choose not to purchase. This would represent a consumer welfare loss.

uninformative in a free entry setting however as the higher prices would attract more firms until profits were dissipated.

4.12 A discussion of tests for excessive prices is contained in Chapter 3 and is the method suggested to identify search costs in Hunter et al. (2001). Clearly however, large price-cost margins could be explained by other factors than search costs.

4.13 We have seen however that search costs in a homogeneous good market can lead to price dispersion between stores. Stahl (1989) analyses the distribution of prices which would result amongst firms selling a homogeneous good to consumers, some of whom had no search costs. The prices charged lie between marginal cost and the monopoly price with full information. The link between the extent of the price dispersion (that is the spread of prices found in the market) and the search costs is not monotonic. If search costs are small then prices will all tend to approach competitive levels and there will be little price dispersion. As search costs rise, the maximal and average price levels will approach monopoly levels – however the lowest price available in the market will also rise. This implies that the spread of prices need not necessarily increase with search costs.[203]

4.14 Therefore, though greater search costs does not mean greater price dispersion, the fact remains that price dispersion may lead to a consumer detriment by consumers receiving differing deals, and price dispersion would not be expected in a full information fully competitive homogeneous goods market. This insight, and desire to produce an indicator independent of requirements for firm cost information, suggests the following tests for price dispersion in the market for a homogeneous good:

$$\text{price dispersion test} = \frac{\max(\text{price}) - \min(\text{price})}{\text{mean}(\text{price})}$$

[203] The Diamond (1971) model has high search costs and no price dispersion at all.

4.15 The mean(price) variable indicates the arithmetic mean of the prices charged. We must stress that welfare is not monotonic in this indicator. For example, an industry with uniformly high prices would not have a high value with this indicator. However, an industry where price discrimination between consumers was active so that some consumers paid more than others would increase this indicator. This indicator is therefore a measure of inequity.

4.16 This would be a desirable statistic, but is unfortunately impractical as we have been unable to identify a source of price information at the firm level across the economy which could be secured at reasonable cost.[204]

4.17 We finally note that price dispersion refers to a homogeneous good being priced at different levels in different stores. The danger of the indicator proposed is that the data will ignore product differentiation and compare the prices of products which are actually different. If this were to happen then the indicator would overstate the extent of any consumer detriment.

Product characteristics uncertainty and consumer detriment

4.18 Consumers may be unsure as to the quality of the product being purchased and unable to determine true product quality or characteristics as a result of search costs. In such a situation consumers may buy too much of a product of inferior quality or purchase a product which is not ideal for their needs. If consumers can identify the product's quality and characteristics after engaging in search, but before purchase, then the situation is very similar to the consumers having uncertainty as to the price of the product. Specifically, one can think of the value of a product to a customer as its price less an amount which captures the utility from owning a product of the given quality. Consumers can identify their net utility of purchase after search, and greater search costs result in some consumers not searching and so not maximising their net utility. This insight is however weakened by the work of Anderson and Renault (1999) who show that when products

[204] This analysis could be conducted with Nielsen data, but to acquire such data for the whole economy would be prohibitively expensive.

are differentiated then consumers have an extra incentive to search and so price dispersion effects can be mitigated.

4.19 If, however, consumers cannot identify the product's quality until after purchase, if at all, then more serious consumer welfare losses may result. These are examined in detail in Section 4.69.

Empirical justification for linking search costs with consumer welfare

4.20 Section 4.4 has discussed a number of theoretical papers which have postulated that search costs will lead to increased prices, consumer detriment and possibly price dispersion. We now consider the extent to which these predictions have been bourne out in empirical work. Empirical analyses which capture the effects of search costs on competition are limited due to the difficulties in quantifying the extent of search costs faced by consumers. The link between search costs and price levels has been explored using evidence from online sales as the internet is one medium through which search costs for consumers can be reduced. Brown and Goolsbee (2002) analyse the effect of the internet on the price of life insurance in the 1990s. They suggest that the ease of search engendered by the internet has reduced prices for consumers by a full 8% to 15% and has also reduced price dispersion. Unfortunately for our search for empirical indicators, Brown and Goolsbee (2002) do not have access to some industry level internet advertising database. Instead the authors model internet usage in terms of individual characteristics. Using personal data on the buyers of insurance they can infer the consumers' likely internet use. They then separate their sample into those where insurance is sold over the internet and those where it is not. The authors are then in a position to derive their results.

4.21 One study which has attempted to explore the link between search costs and price dispersion is Adams (1997). Adams compares the prices for petrol (a low search cost item) to the price of convenience goods sold in-store (high search cost items). He finds that price dispersion is significantly greater for the high search cost items than for the low search cost item: a result in tune with the theoretical results reported above.[205] In a similar vein, Yoskowitz (2002) notes the existence of price dispersion in the homogeneous market for water (for irrigation or industrial processes) in Texas. The author actually points to buyers who paid different prices for the same good.

Indicators of search costs, data allowing

4.22 If data were not an issue then the following indicators and answers to the following questions would provide guidance to an analyst as to whether search costs were present in the market considered, and whether they were having an adverse effect on consumer welfare:

[205] This study does not however quantify which good is low versus high search cost – this is noted exogenously by the modeller.

Table 4.1: Possible indicators for the presence of search costs in a data rich world

Indicator	What the indicator captures
Indicators capturing the presence of search costs and consumer welfare detriments	
• Is there price dispersion for similar products, either within firms or between firms?	Search costs can lead to price dispersion, whilst with full information all consumers would pay the same price for identical goods. When price dispersion is high, some consumers receive a low price whilst others receive a high price. This is inequitable and the consumers purchasing at the high price are likely to be paying a price which is above the competitive level.
• Are prices significantly above costs?	Search costs can allow firms to raise their prices above the competitive level. This is damaging to consumers who pay a greater than average price.
• Are some firms making excess profits?	If search costs are causing some consumers to pay above costs then these firms may be making too high profits. These profits would however be dissipated if there was free entry into the market.
Indicators Capturing The Presence Of Search Costs Only	
• Does future use affect the total lifetime cost of a purchase in a brand/product specific way?	If so then searching is more difficult. Consumers will only be able to judge their future use with uncertainty and so cannot very well infer the best purchase for them. Search costs are therefore high.
• Is the advertising informative?	Where prices are not included in adverts then this may suggest that search costs are high.
• Do firms state their prices on their websites?	If so, then information will be available here to allow consumers to compare prices thus lowering search costs.
• Is the ratio: $\frac{\text{Internet advertising spend}}{\text{Sales}}$ high in the industry (compared to other OECD countries or other UK industries)?	If this ratio is high then consumers are likely to have access to substantial details of the products over the internet. This is dependant on information available on the internet being informative however. In this case internet advertising spending should correspond to lower search costs.
• Is the product a taboo or embarrassing one?	Consumers may be hesitant about frequenting many shops before deciding on a purchase. This would limit the extent of search.

4.23 The extent to which any of these indicators are practical to use in an economy wide study is considered in the next section.

Practical indicators for top down analyses

4.24 The aim of this study is to identify indicators which could be used to scan across the whole economy and identify markets in which a closer look for possible consumer welfare losses might be valuable. To fulfil such a brief an indicator must be capable of being populated by existing data sets allowing industries to be compared against each other, or international comparisons to be conducted. This places a substantial limitation on the possible ways in which search costs can be identified.

4.25 We have already noted that two possible implications of search costs are average prices greater than the competitive level, possibly leading to excess profitability[206] and also the occurrence of price dispersion. We have also noted that price dispersion is not a feasible indicator to populate.[207]

4.26 The other possible indicators outlined in Section 4.22 above are however questions for which we have been unable to find answers in any generally available database. This sadly includes estimates of advertising spend on the internet.[208]

4.27 We therefore conclude that indicators for search costs are on the whole impractical, as are indicators of price dispersion. We therefore now

[206] Though some form of entry barrier would be needed for these excess profits not to be dissipated away.

[207] See Section 4.11.

[208] The Advertising Association provide estimates of internet advertising expenditure for the whole UK economy, not broken down at all. Brown and Goolsbee (2002) use internet usage figures from Forrester Research. This is a boutique consultancy which conducts surveys and then sells the results. Forrester may be able to conduct a survey of firms in the UK economy to assess internet advertising spend, but the data would be proprietary and, being a survey, would not be exhaustive of every firm (or potentially even a large fraction of the firms) in the UK economy.

examine other specific forms of informational disadvantage which may be faced by consumers.

Focal Points of Competition

4.28 There are two possible interpretations for focal points, both of which have a bearing on the competitiveness of an industry. The first interpretation is that firms may focus their customer information on one specific feature of a multi-characteristic product. This could be photocopier sales people focusing exclusively on the price per page for example. A second possible interpretation is that firms focus on discrete pricing strategies when competing thus preventing the possibility of gradual undercutting. An example might be the practice of posting prices in terms of percentage commissions. If firms are reluctant to suggest percentages which are finer than ¼ percent for example, then a focal point has been introduced: in such a situation a firm may feel it has to lower the price by the equivalent of 0.25% commission to undercut a rival.

4.29 We explore the implications on consumers of both types of focal point in turn.

The detriment of firms focusing advertising on one feature

4.30 Due to limitations on how much information can be conveyed in advertising, firms will have to select only a number of product characteristics to advertise over initially. This does not generally mean that further details cannot be seen on demand – however the risk exists that search costs will be higher for information on the non-headline characteristics. If consumers do have search costs then it is possible that consumers select their products on information over a subset of the characteristics, ignoring other potentially useful characteristics.

Consumers may therefore end up with a product which was not the ideal one for their needs.[209]

4.31 The presence of focal points in advertising can therefore result in consumers purchasing a product which is less-than ideal for their needs. Note however that recent work in economic theory suggests that this form of focal point may not be such a large problem in and of itself. In particular, Irmen and Thisse (1998) have examined firms' characteristics choice in multiple dimensions. They find that firms would ideally like to be maximally differentiated on one characteristic and be minimally differentiated on the others. This is because firms would like to design their products to cater for the average tastes and so maximise the number of consumers who desire the product. This result therefore suggests that consumers acquire most of the relevant information by considering the one characteristic that firms choose to advertise over – as this will be the characteristic which differs most between firms.

4.32 Though we are not aware of any empirical studies which explore this, the possibility remains that focal point advertising can lead to consumers buying less than ideal products due to a lack of information on all the products' characteristics.

Indicators of a focal point for advertising

4.33 The main method of identifying focal point effects in advertising is observation of the pricing practices in the market to seek focal points in the pricing of the services offered – this is not a method which can be applied as an algorithm across the whole UK economy. The key effect of focal point advertising is that consumers may purchase a product which is less ideal for their needs than a rival's product would have been. It is possible that such focal advertising can lead to consumer switching after purchase as consumers realise their initial error. However, evidence of consumer switching may also arise due to well functioning competition as firms strive to win business from each other.

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209 We note, in passing, that focal points of this nature will act to reduce price-dispersion as products will appear to be more similar than they actually are.

We therefore conclude that practical indicators of consumer detriment from advertising focal points are unavailable.

The detriment of firms descretizing their strategy space

4.34 The key concern here is that firms may habitually set prices in discrete bands which then limit the scope for undercutting rivals. This would allow prices to be maintained at a high level as incremental discounting is discouraged by virtue of the focal points. Potential industries in which this may occur are those in which prices are quoted in terms of commission percentages: the focal points would arise due to a reluctance to quote commission rates which ran to a large number of significant figures (e.g. 1.495% is rarely seen as a price, though this may equate to a substantial reduction on 1.5%). If such a focal effect were to exist, then firms may be in a position where just undercutting a rival is difficult due to the communication issues – undercutting to the band below (1.25% in the example given) may not be profitable. Thus prices may be sustained at high levels. In addition collusion, whether tacit or explicit, could be more easily sustained as any deviation would have to undercut rivals by a substantial amount down to the next discrete price band.[210]

4.35 Though this concern is theoretically plausible, we are not aware of any empirical studies which have explored the effect on prices of price levels being quoted in percentage terms rather than real levels. However, this was one factor considered in the review of the Estate Agency Market undertaken by the OFT.[211]

Indicators of focal points leading to pricing in discrete steps

4.36 The theoretical justification for being concerned about this is clear as prices can be sustained at high levels as a result of the pricing focal

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[210] Such a large price reduction would lower the benefit to deviating from the cartel agreement and so help sustain the cartel.

[211] 'Estate Agency Market in England and Wales', available from http://www.oft.gov.uk/business/market+studies/estate+agents.htm

points. If data were not an issue then the following indicators and answers to the following questions would provide guidance to an analyst as to whether these types of focal points were having an appreciable effect on the market considered.

Indicator	What the indicator captures
• Do all prices lie on a limited discrete set of values?	If so, then it would suggest that firms cannot undercut each other by a small amount. This focal point may therefore be used to keep prices high.
• Are prices quoted in percentage terms?	In such markets the urge to keep to round figures can enforce focal point effects.
• Are prices 'excessive'	Focal points may allow prices to be sustained considerably above cost. Searching for this effect can act as an indicator of focal point pricing.
• Are profits high?	The higher prices sustainable if pricing is in discrete steps may translate into higher profits if there is some entry barrier preventing these profits being competed away.

4.37 Tests for whether profits or prices are excessive are captured in chapters devoted specifically to those themes. Unfortunately we know of no ready dataset which captures whether prices are quoted in percentage terms. It appears to us that this question is not one which can be answered as part of a top-down analysis across the whole economy. Rather it is a question to be answered once a sector is being examined in detail.

4.38 Analysing the structure of prices to identify if prices lie on a limited subset of possible values appears at first glance to be more promising. Firm level price information would be needed to populate this indicator. Appropriate information would be available from a source such as AC Nielsen. However, data would be required for the whole economy which would be prohibitively expensive. This is not therefore a practical indicator to use and populate. In addition, the most likely industries to exhibit such a focal point are ones which quote prices in percentage terms. If the database data were to record actual prices paid (rather the format in which the prices were quoted) then the nature of the discrete strategy space would be missed.

4.39 This form of focal point is not therefore one which can be readily identified in a top-down analysis.

Bundling and After-Markets

4.40 Bundling is the generic term used to refer to situations in which a firm links the purchase of product A to some other product B. It may be that A cannot be bought without purchasing B, or that the price for either product on its own is altered depending on whether the second product is also purchased. There are typically two major sources for concern which arise in markets where bundling is practiced. The first is that bundling can be used to erect entry barriers or force firms to exit – that is that a firm with market power in one product (A say) may use this power to try and establish (or defend) a dominant position for itself in the second market (B). The second source of concern is the situation created when product A's use requires future purchases of product B (printers and cartridges for example). In this case consumers may choose to buy product A without internalising the likely future cost of B which they will be forced to incur. That is, consumers get a poor deal in the aftermarket which they did not fully consider. We will explore both possible concerns in this section.

The theoretical justification for concern about bundling

Bundling as an entry deterrent or to induce exit

4.41 The key concern here is that firms which only have the ability to sell from a limited production line (e.g. only product B and not product A) will find entry more difficult against a full line rival. This can have the effect of deterring even efficient entrants from entering the market. This process can happen in the following two ways:

Bundling To Signal An Aggressive Response To Entry - Whinston (1990) suggests that if the bundling of products is a difficult decision to reverse, then a firm with market power in one market (say A) may try to leverage this market power into a related market (B) by tying the two goods together and only making the one available if the other is bought. Potential entrants into market B will now realise that if this firm were to lose a sale in B it would lose the sale in its dominant market (market A) also. This will make the incumbent firm respond to entry aggressively in prices. Appreciating this, potential entrants will re-evaluate their entry decision and may decide not to enter if the slim revenues are insufficient to cover their costs.

Bundling To Limit A Rival's Profits And Potentially Induce Exit - A firm may choose to withdraw a component for sale alone (product B say), only selling it bundled together with a related secondary product (product A). If products A and B are used together by a substantial proportion of the consumers, then the available customers for a limited line entrant selling only product B are reduced. This reduction in potential customers will lower the profits available to a new entrant and may make entry unprofitable if there are sunk costs to be incurred. This model has been proposed by Nalebuff (forthcoming).

4.42 These two effects can clearly have a dynamic effect on the nature of competition in a market. Because of their dynamic nature the situations are most likely to be identified due to increased concentrations and possibly increased profitability in the markets where the incumbent has succeeding in establishing market power through bundling.

Bundling and the creation of an after-market

4.43 Suppose that product A's continued use is dependent on purchasing product B from the same firm. An example might be a firm selling printers and then ink cartridges whilst rival ink cartridges are incompatible. A purchase of a printer therefore ties the customer to the purchase of ink cartridges from the same firm. This is an example of tying. The key insight is that tying has introduced a switching cost for the consumer: to swap to different cartridges means incurring the cost of a new printer for example.

4.44 As tying creates switching costs, the main effects on competition are discussed in detail in section 3 on switching costs. Here we focus on aspects which are more specific to the fore-market/after-market trade created by tying.

4.45 Typically such markets are characterised by relatively low prices in the fore-market to attract the purchase and relatively high prices in the after-market once the consumer is committed. It may seem that this after-market pricing reduces consumer welfare. In fact this is not at all clear: strong competition in the fore-market is likely to have refunded much (if not all) of the profits in advance. In addition, consumers with full information will have been able to decide for themselves the best product based upon their future use. However, consumers who are future light-users of a product do lose out as they would have been better off by choosing a package with cheaper aftermarket prices and more expensive fore-market prices. Likewise future heavy users benefit from this structure of prices.[212]

4.46 The effect of fore and after-markets on consumers has been explored in some detail in an antitrust context by Shapiro (1995). Shapiro notes that consumers who have the most to lose from high after-market prices have the most to gain from finding out about the after-market prices and striving to form views as to their future use of the service. Therefore, if there is competition in the fore-market, the detrimental effect on consumers from the price structure is likely to be limited as vulnerable consumers (with heavy future use) search for the best deal.

4.47 In conclusion therefore, the main consumer concerns with bundling to create fore and after-markets are substantially mitigated if competition is strong in the fore-market. If not then this is likely to be because of some other reason such as barriers to entry (for example) and is likely to also result in firms with excess profitability from the fore- and after-markets taken together.

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[212] Thus Shapiro notes that this form of after-market pricing creates a form of price-discrimination where heavy users pay more as they have to buy more from the aftermarket. However, though price discrimination can have detrimental consumer effects, it can also be welfare enhancing when the size of the market is increased.

Indicators for bundling potentially having detrimental consumer effects

4.48 Unfortunately it is very difficult to identify two separate markets which are linked by bundling in a top-down analysis of the economy. Such links typically only become apparent once a particular market is studied. Nevertheless, the detrimental effects of any bundling can arise because of a lack of competition in the fore-market. Such a situation is likely to be identified by other indicators, such as the ones around entry barriers.

4.49 Not withstanding this caveat, we have constructed a list of indicators which would allow *problem* bundled markets to be identified, data allowing. We will discuss data constraints in the next section.

Indicator	What The Indicator Captures
Are rivals' products compatible in the aftermarket?	If not then tying could switching costs which a consumer must incur if they wish to change the brand of their after-market product.
Is there excess profitability in the after-market taken alone?	Such a result would be compatible with the identified market being the after-market to a tied purchase. Closer inspection would identify if the excess profits were being refunded back in a different market.
Are profits over both the after and fore-markets excessive?	If the fore and after-markets could be identified then this indicator would move directly to assess if competition overall is sufficiently strong.
Do single product line competitors have small market shares in the after-market?	If so then the bundling strategies may be being effective at preventing the successful entry of limited line rivals.

Do firms have strong reputations?	If so this would prevent the exploitation of consumers in the aftermarket, as such exploitation would damage the reputation of the firm.
Are buyers able to deduce their lifecycle cost of ownership?	If so then consumers are in a position to make a life-cycle cost based decision on which product to purchase.[213]
Is the same buyer making choices in the fore-market and the after-market?	If not then the first buyer does not internalise the increased costs to the subsequent buyers, and the subsequent buyers may be left with a product which is less than ideal for their needs.[214]

4.50 Unfortunately these indicators do not lend themselves to a top-down analysis of the economy as whether two products are linked by bundling or not will only become apparent through detailed observation. We do note however that any competition issues which arise (e.g. excess profits) would be captured by separate indicators proposed in the other chapters.

[213] An issue which often arises here is one of ease of comparability: a consumer must be able to calculate the cost of ownership, not just the likely future use. For example, a purchaser of a printer must not only have an estimate of the likely quantity of future printing in pages, this quantity must be translated into a cost using an estimate of the number of pages per cartridge. If this latter step is difficult then the life-cycle cost of ownership will be hard for a consumer to estimate.

[214] Examples of such behaviour may occur in the NHS where hospitals buy a drug first, and then GPs have to buy further doses as the patient has become comfortable with the given brand of drug they received initially.

Commission Payments

4.51 Commission payments covers the situation in which the sales person's reward is contingent on the specific product sold. The seller may therefore have substantial incentives to see the buyer buy a certain product and not others. In situations in which the seller has superior knowledge as compared to the buyer then there is a potential moral hazard problem: the seller could be in a position to gain by misinforming the buyer (misselling) or at least encouraging a decision which is not the very best that the consumer could have made.[215] We first explore the theoretical concerns around when commission payments may have a detrimental consumer effect before exploring indicators which could be used to identify such markets.

The theoretical link between commission payments and consumer detriment

4.52 We first note that where search costs are small, commission payments should not affect the competitive outcome. This is intuitively clear: in markets with few search costs, consumers are able to compare the offerings from a number of different outlets.[216] The salespeople will therefore be in competition with each other, the scope for mis-informing the buyer, or recommending a less advantageous purchase, is less as more information can be acquired at low cost (second opinions are therefore inexpensive to acquire).[217] There is therefore nothing a priori anti competitive about sales commissions – indeed it can be an effective way in which to incentivise sales staff to exert effort.

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[215] This latter case may not involve the seller actually giving out misinformation, but rather failing to inform the buyer of all relevant facts.

[216] This reasoning will apply even more strongly in business to business interactions where firms have every incentive to research purchases fully.

[217] The attentive reader might be concerned that if one seller outright lies then getting a second opinion will be of little value as the two opinions will differ. However, at this point, with low search costs, a buyer is likely to ask for 3rd and 4th opinions at which point the correct information should start to become apparent.

4.53 It is important to note that search costs incurred in acquiring second opinions include the opportunity cost of a consumers' time. For example, if one's car breaks down and needs a new car battery, though search costs might appear to be low to someone investigating the car battery market, when a battery is actually needed, the search costs are high (as to explore the market means remaining longer stuck at the side of the road).[218,219] The moral hazard problem created by commission payments can therefore exacerbate the problem of search costs in a market and lead to increased prices.

4.54 To the extent that consumers are in a position to offer repeat business, salesmen may seek to develop a reputation as an honest broker thus mitigating the incentive hazard problem. This effect will be strongest where consumers are in a position to determine whether or not the product is good post purchase. Such products are known as experience goods and might include a car for example. Commission payments are less likely to lead to consumer detriment in such repeat purchase markets.[220]

4.55 If the consumer cannot determine the quality of a product, even after its purchase, then the consumer is purchasing a credence good.[221] In such situations the link between repeat business and product quality is broken. Here the consumer is indeed quite vulnerable to exploitation by the salesperson. Indeed, Tirole (1990, p106) notes that these type of goods '*often require government intervention*'. The key dilemma here is

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[218] This is an example of alleged commission induced mis-selling of car batteries by the RAC broadcast by the BBC in January 2003. See http://news.bbc.co.uk/1/hi/england/2669175.stm for further details.

[219] In fact, Buccirossi (2003) shows that when consumers face such high search costs at the point of purchase that they choose a firm essentially at random, then prices will rise to above monopoly levels.

[220] A similar intuition underlies Bentz (2001) result that if a commission is only paid to the salesperson for the first transaction, then a high commission rate can be used to signal a high quality product to the consumer. The provider of the good, confident of the repeat business, is happy to pay a great deal in commission to the salesperson thus separating the firm from low quality good providers.

[221] An example might be medical advice where feeling unwell after a visit to the doctor does not indicate whether a different doctor might have done a better job.

that it is very difficult for consumers to establish if a product they have been sold is of high quality and so have no way to discipline the salesperson.[222]

From theory to indicators of consumer detriment

4.56 The theory above is clear that commission payments can exacerbate the effect of any informational disadvantage suffered by the consumer. The consumer might therefore suffer by being encouraged to buy a product which is not maximally advantageous without actually being told any lies. At its most extreme however, the salesperson may actually seek to misinform the buyer so as to increase his or her commission payoff. Indeed, instances of mis-selling due to commission structure have been alleged in the UK (see footnote 218).[223] If data was no barrier, then the following indicators would allow industries in which commission selling may be detrimental to consumers to be identified:

Indicator	What The Indicator Captures
Are there no search costs in the market at the point of purchase, and is there effective competition between sales agents?	If both apply then consumers will be purchasing with full information and as the salespeople are in competition with each other, the price should be forced down to competitive levels. Otherwise sales commissions can lead to consumer detriment.
Is there a reputable independent analysis of the market (e.g. a Which? report)?	The presence of such a report reduces the consumers' informational disadvantage. However, the availability of such a report suggests that the market was deemed to be a complicated one where search costs were an issue, and so those consumers who do not access the report may be

[222] Credence goods are examined in more detail in Section 0.

[223] Other anecdotal examples of industries which are vulnerable to both misselling or misleading advice are travel agency services and the sale of financial products.

Indicator	What The Indicator Captures
	disadvantaged. In addition, just because a report on a market exists does not imply that salesmen are receiving commissions. This indicator is therefore more of an indicator for complex products. (See section 4.63)
Is there a difference in the choices made which corresponds with education but not with income?	It may be that more educated customers are better able to spot misleading or incomplete information from a seller and so decide on different sets of products. This would suggest that the commission payments were having a deleterious effect on the product choices made by some consumers. One would need to be careful though, to the extent that education is correlated with income through ability: Consumers may quite legitimately be making differing choices on account of their wealth (and hence attitude to risk). This is why the indicator seeks to split the effect of education from income.[224]
Is the purchase a repeated one of a product which a consumer can evaluate after purchase?	When business might be repeated, the possibility of future sales from a satisfied customer will act to discipline the seller. Commission based consumer detriment is unlikely here.
Are consumers informed as to the exact nature of the salesperson's incentive structure?	Without this information a consumer may be unable to determine the direction of possible bias in a salesperson's advice. This can help to exacerbate the moral hazard problem.

[224] This indicator would require a very detailed and difficult econometric exercise to actually allow it to be deployed. For this reason the indicator is not practical in an across the economy study of commission payments.

The quest for a practical indicator

4.57 Though the indicators above would allow potential consumer detriment arising from commission payments to be identified, the data required is of a detailed nature. The indicators this study is searching for are ones which can be used in a top-down study of the UK economy. The majority of the indicators described above are detailed questions which can typically only be answered by in depth study of a given market. We will explore each of the above indicators for practicability in turn.

4.58 The first indicators described in Section 4.56 above note that search costs combined with a lack of competition between sales agents can have a detrimental effect. Indicators for both of these have been discussed elsewhere. In particular, search costs lead to higher prices and indicators for excessive pricing are discussed in Volume 1 Chapter 6. To identify whether there is effective competition or not is a general aim of most of the indicators identified in this report: for example, chapters on barriers to entry and productivity propose indicators which are aimed at exploring exactly the extent of competition in UK industries.

4.59 Whether there is a reputable independent analysis of the market can be proxied by the availability of *Which?* reports. However, we have noted that this indicator can indicate both an amelioration of information constraints and also an acknowledgement that information constraints exist. In addition, the fact that an industry has a *Which?* report does not imply that salespeople receive commissions. This indicator therefore captures complex products and is therefore discussed in the next section.

4.60 Whether or not consumers' are informed of the salesperson's incentive structure, or whether the good is a credence good are not captured in any database we are aware of.

4.61 It is also problematic to make practical the indicator which searches for differing customer choices on account of education. Such an indicator would require the demographic characteristics of buyers for a given product to be captured, including the educational level. One would not be able to proxy for education using income otherwise one might be picking up legitimately differing choices dependant on income. Not only is this a detailed study, in addition we are not aware of any datasets which capture consumer choice (down to the brand purchased) and education level across the economy.

4.62 We have therefore been unable to identify an economy wide indicator capturing consumer detriment from commission payments directly. However, price and profit based indicators can capture situations in which prices are too high, and we will consider the applicability of consumer reports in the next section.

Complex Products

4.63 Most products have multiple characteristics[225] and consumers will need to compare slightly differentiated goods when making their choice. This is indicative of a well functioning economy in which consumers have choice. Competition problems only arise where consumers do not acquire full information to allow them to make a satisfactory trade off between the different products on offer. This limited information acquisition is an example of search costs in action and as such, the main issues outlined in Section 4.4 apply.[226]

4.64 We first outline the key mechanism by which the sale of complex products can lead to consumer detriment before we turn to the hunt for practical empirical indicators.

The theory behind the concern at the sale of complex products

4.65 Products which are complicated will have a number of dimensions all of which will affect a consumer's enjoyment. As the complexity of the product grows, so does the probability that the consumer will not have ascertained every characteristic of the product prior to purchase and compared it with the other available products. For example, when a consumer is buying a car, they may have compared the fuel efficiency, but they might have neglected to compare the maximum torque or the braking distance. This provides a firm with an opportunity for short term customer exploitation. That is, a customer can be sold a product with characteristics which are not as suitable as imagined but weren't checked. This can be profit enhancing for the firm if the included characteristics were cheaper to produce (e.g. of lower quality). The probability of this mismatching occurring increases with the complexity

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[225] Exceptions may be a gold bar for example.

[226] We note that search costs may be high so that consumers do not acquire information on many prices. Alternatively search costs may be low (but still positive) but there are so many products to choose from that a consumer elects to only acquire information on a subset allowing higher average prices to emerge.

of the product. In addition, search costs can also exacerbate this problem. This is because in a market without search costs, competing firms have every incentive to highlight deficient characteristics of a competitor's product and will thus inform the potential consumer.

4.66 One key mechanism by which the potential consumer harm associated with complex products (and exacerbated by search costs) can be ameliorated is through the requirement the firm has to maintain a good reputation for its product. Specifically, if the quality of good sold on one day is correlated with the quality of good which will be available on the next day, then repeat purchases allow a consumer to form increasingly accurate views of the product being sold. In such a situation consumers will be able to experiment and identify the best product for their needs. Firms will be deterred from trying to exploit consumers by lowering the quality on a hidden characteristic of a complex product by the threat that consumers may leave to try a rival's product. Such a model can be found in Tirole (1990, p112) and Kreps and Wilson (1982).[227]

Empirical indicators for problems arising from the sale of complex products

4.67 Even with very detailed data, it is hard to establish if a consumer would have derived greater utility by purchasing a different complex product. The main defence against consumer harm is therefore that consumers should have as much information as possible. Perceived markets for complicated products can therefore be inferred by the availability of consumer reports such as *Which?* magazines. The presence of a *Which?* magazine focusing on a given product would suggest that it is a complicated one where consumers may be being disadvantaged. However, this indicator is somewhat unsatisfactory as the presence of the *Which?* magazine acts to inform the customer and so ameliorate any competition problem. In addition, not all *Which?* reports are about equally complicated markets. Additionally the list of products covered by *Which?* reports is available in a not very user-friendly form for our

[227] Section 4.69 will discuss the implications of infrequent purchases where the reputational effect is much weakened.

purposes from www.which.co.uk. Finally there are over 500 *Which?* reports – as this is a binary indicator (does a report exist or not) the large number of reports suggests that this is a poor indicator of markets for complicated products which may be giving rise to some consumer detriment.

4.68 We are not therefore able to propose a top-down indicator which would be of value in identifying problem complex markets. However, we note one trend which could be useful: the internet. We have noted in Section 4.4 that internet advertising can reduce search costs. In addition internet advertising reduces the difficulty consumers may face in comparing the characteristics of differing products. Therefore the greater internet advertising the less the problem of complex products is likely to be. This reasoning suggests that the indicator briefly considered in Section 4.22 might be applicable. That is, if the ratio $\frac{\text{Internet advertising spend}}{\text{Sales}}$ is high then consumers are likely to have access to substantial details of the products over the internet and so the consumer detriment springing from complex products would be mitigated. This is dependant on information available on the internet being informative however. Unfortunately, as noted in Section 4.22, at present we are unable to populate this indicator for the UK economy.

Infrequent Purchases and Credence Goods

4.69 The general theme of this chapter has been information effects. That is, consumers having incomplete information when making a purchase – a situation they do not remedy due to search costs. We have noted in the previous sections that reputation effects and the earning of repeat purchases can help alleviate the informational problem as sellers strive to improve the match between buyer and product so as to earn future rents. The final section of this chapter notes that reputation and repeat purchase effects offer little protection to consumers of products which are infrequently purchased or are credence goods. We first recap on the theoretical reasons to be concerned about infrequent purchases and credence goods and then explore what, if any, empirical indicators can be used to identify problem industries.

Reasons for concern about infrequent purchases and credence goods

Infrequent purchases and a theory of consumer harm

4.70 If a sale to a consumer is unlikely to affect future rents from that consumer (as future purchases are infrequent) then firms face a short run incentive to lower the quality of their products without informing consumers as they can then make extra profits on this sale. Such exploitation could lead to the firm acquiring a bad reputation amongst consumers. However, if the same consumer purchases only very infrequently, then a free-riding problem exists: all consumers would be able to agree that low quality firms should be identified, but the benefit of notifying society of a poor firm only falls to those who have yet to purchase whilst the customer doing the notifying incurs the cost. This can limit the extent to which poor firms earn a deleterious reputation.[228]

4.71 In addition, the protracted time between repeat purchases mean that past quality may be a poor guide to future quality. It is therefore conceivable that a consumer who buys a product which has lower than expected quality, will still return for a repeat purchase after a significant period of time has elapsed.

4.72 Note however that multiproduct firms have reputational spillovers which can act as a disciplining force. For example, if a supermarket were to sell a poor quality own branded product which was purchased infrequently, then it might damage the reputation of all of its own branded produce (the reputational spillover) and thus affect future sales of other goods. This effect would act to protect purchasers of the infrequently purchased product.

[228] Industries serving tourists in a given area are very subject to such considerations for example.

The consumer problem around credence goods

4.73 We have already discussed credence goods in relation to sales commissions in Section 4.52. We recall here that a credence good is one where a consumer cannot determine if they have received a good product, even after its purchase.[229] In such situations the link between repeat business and product quality is broken as product quality cannot be identified. Not only that, but individual consumers are not in a position to inform others of poor service (even if they wanted to) again as they are unable to identify such service. Here the consumer is indeed quite vulnerable to firm exploitation. As a specific example, in the Swiss canton of Ticino, the general population averaged 33% more of seven studied operations than the medical doctors and their families, reports Domenighetti et al. (1993).[230] This suggests that doctors are over prescribing surgery and is put forward by Emons (1997) as a possible example of the abuse of the credence good nature of medical services.[231]

4.74 For some credence goods, consumers can ask for quotes/indications from several firms (e.g. getting a second opinion) to try to mitigate the credence good problem – but this can be costly both in time and in money. In fact Wolinsky (1995) predicts that consumers will have to pay above cost as the informational asymmetry between customer and firm translates into firms' ability to charge a mark-up over costs.[232]

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[229] An example might be medical advice where feeling unwell after a visit to the doctor does not indicate whether a different doctor might have done a better job.

[230] This reference is provided by Emons (1997).

[231] We note that an alternative possible explanation for this finding is that doctors notice developing probems earlier in their own family and so can deal with them in ways which do not require surgery.

[232] Emons (1997) has shown that, even without second opinions, in some situations consumers can use firms' spare capacity and market shares to infer whether the expert has an incentive to be dishonest (by filling up spare capacity or making a profit on excess repair say). The equilibrium proposed here is extreme in that it either has experts extracting all of the rents or alternatively consumers extracting all the rents with prices driven to zero. In both of these situations the margins on diagnosis and repair are the same and the expert is honest. In

From theory to practical indicator

4.75 Ideally we would first like to identify which industries had infrequent purchases and which sold credence goods. However, we are unaware of any database which contains data of this sort. Rather such questions can only be answered by a bottom-up detailed analysis of specific industries.

4.76 We noted that the direct effect of infrequent purchases is that consumers may receive a good of lower quality than expected. One possible way by which this might be identified would be to explore the rate of returned products by industry and compare with the same product in other countries. However, we are not aware of any database which contains this data at an economy wide level.

4.77 Credence goods markets leading to consumer detriment are even harder to capture, as by their nature, a consumer will be unaware if they have received a poor product or been over provided with service.

Conclusion

4.78 The amount of information possessed by consumers, and how cheaply such information can be improved, can have substantial effects on the competitive equilibrium. However, databases do not exist which capture directly how easy it is for consumers to acquire correct and accurate information about firms' offerings. For this basic reason empirical indicators of information levels are hamstrung. Nevertheless, we note that:

- Imperfect information and search costs will allow average prices to rise, tests for excessive prices (discussed in the pricing chapter) should therefore be sought where practicable.

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addition the author assumes (p 117) that demand for expert services is a strict integer of the capacity of one expert – otherwise firms have spare capacity and the proposed equilibrium breaks down.

- Every credence good market identified should be examined as consumers cannot judge the quality which they are receiving. Any extra information which can be provided by government here is likely to be beneficial.

- Finally, a survey may be one method by which consumers can be asked to identify markets where they believe they were originally encouraged to make a purchase which was not as advantageous as possible. This information does not exist as yet, but such a survey could be used to identify markets where commission payments are having a deleterious effect directly.

5 OTHER INDICATORS

Introduction

5.1 This chapter investigates miscellaneous important market characteristics which have not been considered elsewhere. As in the other chapters, we are seeking to construct empirical indicators which could be deployed in a systematic way using cross-industry databases that could provide evidence that a market is not functioning well. The conclusion we come to is that, in general, it is impractical to construct indicators that would capture these market characteristics in a top-down fashion, and could only be evaluated by more detailed market investigation. The possible exceptions to this are market growth and import penetration.

5.2 The features we consider are:

- Multi-market contact
- Spare capacity
- Bidding markets
- Survey evidence on diversion ratios
- Buyer power
- Existence of trade associations
- Presence of 'maverick' firms
- Market Growth
- Import Penetration

Multi-Market Contact

5.3 Multi-market contact refers to a situation in which firms are active in several relevant markets and meet the same competitors in a number of these. The markets may either be separate product or separate geographic markets. An example might be Mars and Nestlé: on the product dimension, these firms are both present in a number of pet food markets but also in confectionary. They also meet across multiple geographic markets.

Theories of competitive harm

5.4 In this section we set out briefly two alternative theories of how multi-market interaction might lead to consumer detriment. The first, due to Bernheim and Whinston (1990), suggests that multi-market contact may promote collusion between the firms in question, and accordingly might be considered as an indicator of competitive detriment. The second, due to Kreps and Wilson (1982), suggests that a single firm with a presence across multiple markets may be able to deter entry by their behaviour in a single market. This theory would be consistent with the *absence* rather than the presence of multi-market contact.

Fostering of collusion

5.5 It is often thought that multi-market contact can facilitate collusion between firms in an industry. The traditional, though incomplete, argument was that multi-market contact can help create a powerful punishment mechanism and hence sustain collusion. Briefly, the idea is that if firms meet in several markets, then a firm can threaten to punish rivals for a deviation from the agreement in several, and not just one, markets. So the fruits of collusion are lost in several markets instead of just one, and the punishment for deviation is more severe.

5.6 However, Bernheim and Winston (1990) point out that although the punishment is more severe, equally the temptation to deviate from collusion is proportionately higher since a deviator could undercut rivals in all the markets in which they meet rather than just one. Therefore, where firms meet in a number of identical markets, the overall effect is not to increase the ability to collude. However, if there are asymmetries in cost or demand between markets then multi-market contact might still promote collusion. The insight here is that the punishment mechanism may be pooled across markets. For example, one can imagine a situation where collusion can be sustained independently in market A but not in market B as the benefits to undercutting are too great in the latter market. However, by pooling punishment mechanisms so that deviation in B is punished in A and B simultaneously, collusion can now be sustained as some of the spare punishment capacity in A is used to discipline behaviour in market B.

5.7 Bernheim and Whinston (1990) also note that if a market contains a number of single market as well as multimarket firms, the insights derived weaken as collusion incentives cannot be spread across multiple markets for the single market firms. In addition, the authors note that the collusive behaviour may not force all prices to rise in differentiated goods situations. The insight for this arises as competing firms may be able to sustain a higher price in some market A by lowering the price in market B and thus lowering the incentive to deviate on this market. This might ultimately allow profits over the two markets to be greater and may increase consumer welfare as some consumers receive a lower price. This possibility is sensitive to the specific discount rates and characteristics of the market, but it does highlight the danger of blindly associating multimarket contact with greater prospects for collusion.

5.8 Some empirical support for the proposition that multi-market contact facilitates collusion has been provided by Evans and Kessides (1994). The authors examine empirically the effects of multimarket contact on pricing in the U.S. airline industry. The authors find that fares are higher in city-pair markets served by carriers with extensive inter-route contacts; a finding which is compatible with the model of Bernheim and Whinston (1990).[233]

Reputation effects and multi-market contact

5.9 Firms which are active in a number of markets may be very aggressive in one so as to protect themselves from entry or expansion in other markets, and thereby increase their market power in these secondary markets. Kreps and Wilson (1982) formalised this effect by noting that a

[233] Further empirical support for the Bernheim and Whinston (1990) result can be found in Parker and Roller (1997) who consider telecommunications prices in the US Cellular telephone industry.

large firm which is aggressive in one market can convince potential entrants that there is a positive probability that it is either very efficient or 'crazy' in the sense that the management enjoy evicting rivals even if profitability is sacrificed. The multi-market firm gains as entry is deterred in the other markets in which the firm trades as a result of the aggressive behaviour in the first market.

5.10 In this case a successful strategy of entry deterrence by reputation would result in a situation where in fact there is *no* multi-market contact. This shows that that there may in fact be reasons to associate multi-market contact with competition.

Measuring multi-market contact

5.11 The first difficulty we have in establishing multimarket contact is that the main empirical findings relate to geographic separation. However the data sources we have available all aggregate results on a national level and so do not allow individual firms to be tracked region by region. At a national level identifying industries in which firms meet in separate markets across all of the economy is an impractical task as multimarket links will often be unique to individual firms rather than industries and so numerous partial links would be found stretching across the UK economy. In addition, even if it were practical, such a measure would ignore the potential for predatory behaviour which arises from being a multimarket firm rather than actual multimarket contact. However, the key effect of multimarket contact is that it can facilitate higher prices in each of the markets individually. Indicators which search for excessive prices or excessive profits will therefore identify directly those situations where multimarket contact is actually leading to some consumer detriment.

Buyer Power

Role of buyer power

5.12 In theory, buyer power could play two different roles as an empirical tool to detect problem markets. First, buyer power can act as a countervailing force to seller power. Accordingly, if there was a useful measure of buyer power among purchasers, this could be used to discard markets that would otherwise be subject to further investigation. In this sense, a measure of buyer power would be used as an acquittal device.

5.13 On the other hand, there is the concern that the exercise of buyer power by a firm (or group of firms) against their suppliers may result in prices which are *too low.* Where the supply curve is upward sloping, a reduction in prices leads to a restriction in the supply to the purchasing firms, and may ultimately lead to a restriction of total supply to consumers, in particular where the purchasers have a degree of market power in the downstream market.

5.14 Further, as noted by Dobson et al. in EC (1999) buyer power may force manufacturers '*to reduce investment in new products or product improvements, advertising and brand building*'. The intuition for this is that if buyers force a lower price on to the suppliers, then the benefits of any investment are reduced.

5.15 These authors also note a potential positive effect of buyer power: lower prices may be beneficial if the cost savings are passed on to consumers. Accordingly, Dobson et al. conclude that **'it is not clear a priori what will be the net economic welfare effect of buyer power...leading support to the argument in favour of a case-by-case policy approach'.**

Measurement of buyer power

5.16 The obvious proxy for buyer power would be concentration on the buying side of the market, as measured for example by the buying side equivalent of the HHI. However, it is not possible to obtain information on the concentration of the buying side of markets using the cross-industry databases that we have identified and therefore this cannot be implemented in a top-down study. This is because databases do not contain links from one SIC code into other SIC codes capturing supplier or buyer relationships. The buying sector cannot therefore be identified for all industries in a consistent and rigorous manner.

5.17 In addition, there is the further complication that individual firm sizes do not capture the effects of buying groups. The formation of buying cooperatives is a practice widely used in the food retail sector of some European countries (see EC 1999, p2). Concentration measures which were based simply on the number of firms under common ownership and which ignored horizontal agreements between them would tend to understate the degree of buyer power.

Spare Capacity

5.18 The effect of the extent and distribution of spare capacity for firms' pricing behaviour is delicate. On the one hand, where firms hold spare capacity they will have strong unilateral incentives to reduce price to fill that capacity. However, the existence of spare capacity, particularly when distributed symmetrically, may promote coordinated behaviour.

5.19 There is also a relationship between spare capacity and entry deterrence. The existence of spare capacity enables incumbent firms to threaten to increase supply and lower the price in the event of entry, which may deter potential entrants if they are aware of the existence of the spare capacity.

Spare capacity and entry barriers

5.20 Having spare capacity can act as an entry barrier in that incumbents can threaten to greatly increase supply and so lower the price in the event of entry. Though this appears to be unprofitable for the incumbent in the event of entry and so incredible, potential entrants may still be sufficiently concerned to avoid entering. Such an entrant response would be rational if the incumbent was active in several markets and wished to create a reputation for aggressively responding to entry (see Section 5.9 above). Alternatively, if the incumbent's cost level was not known, then by pricing low in response to entry and serving a lot of the market an incumbent can convince all potential entrants that it is actually an efficient operator and so they should refrain from entering. The manner in which holding spare capacity can be used as a barrier to entry has been explored in detail in the chapter covering Entry Barriers.

Spare capacity and collusion

5.21 Compte et al. (2002) have analysed the effect of the distribution of capacities on coordinated behaviour in a price-setting model. They point out that a firm with excess capacity will have more to gain by deviating from the collusive outcome and undercutting its rivals. On the other hand, firms with excess capacity will be better able to punish a deviating firm.

5.22 The authors note that the more the future is valued (the larger the discount factor) then the easier collusion is to sustain as firms become increasingly concerned about the punishment they will invite in the future if they deviate today. The authors therefore conduct their analysis by searching for the smallest discount factor which would allow collusion to be sustained.

5.23 Compte et al's conclusions can be captured by the following table:[234]

Table 5.1: Mininum discount rate[235] for collusion from compte et al. (2002)

Can all firms except the largest serve the entire market demand?	Minimum Discount Rate for collusion
Yes	$1-\frac{\text{market size}}{\sum_{\text{firms } i \text{ in the market}} \min(\text{capacity of firm } i, \text{market size})}$
No	$\frac{\min(\text{capacity of the largest firm}, \text{market size})}{\sum_{\text{firms } i \text{ in the market}} \min(\text{capacity of firm } i, \text{market size})}$

[234] Compte et al. (2002) restrict their analysis to what they call α equilibria. These are equilibria in which the firms agree to split the market profits each period in proportions fixed for each firm over time. That is, the market shares of the firms during collusive play, including punishment phases, are constant.

[235] These are taken from equation 2.1 and Proposition 3.3. of Compte et al respectively.

5.24 The smaller the minimum discount rate for collusion to be sustained, the more likely it is that collusion will exist within the Compte et al. model.

5.25 As an example, suppose that a market contains three firms with capacities of 10, 20 and 30 units. The capacity of the firms excluding the largest firm is therefore 30 ($= 10 + 20$).

- If the market demand is 20 units, then during a punishment phase, all the firms except the largest can serve the whole demand. The minimum discount rate for collusion to be sustained is therefore given by:

$$1 - \frac{\text{market size}}{\sum_{\text{firms } i \text{ in the market}} \max(\text{capacity of firm } i, \text{market size})} = 1 - \frac{20}{10 + 20 + \min(30,20)} = 0.6$$

That is, a £1 cost tomorrow must be worth at least 60 pence today for collusion to be sustainable.

- If the market demand were 50 units however, then during a punishment phase all of the firms except the largest cannot now serve the entire market. In this case the minimum discount factor above which collusion can be sustained is now given by:

$$\frac{\min(\text{capacity of the largest firm}, \text{market size})}{\sum_{\text{firms } i \text{ in the market}} \min(\text{capacity of firm } i, \text{market size})} = \frac{\min(30,50)}{10 + 20 + \min(30,50)} = \frac{30}{10 + 20 + 30} = 0.5$$

That is, £1 tomorrow must only be worth 50 pence or more today for collusion to be sustained.

Data sources

5.26 At present, none of the cross-industry databases we have identified have capacity variables and so the collusion indicator based on Compte et al. cannot be populated. However, we are hopeful that this indicator will become applicable across the economy in the near future. Eurostat advertise a series of databases (under the collective name of NewChronos) which include capacity variables. This dataset is restricted to manufacturing and construction sectors. However, though advertised, the capacity fields are as yet unpopulated. It may be that in the near future capacity data will become available. At present however, we do not think that this indicator can be constructed.

The Existence of Trade Associations

5.27 Trade organisations have been described as an 'antitrust powder keg'.[236] They have a number of legitimate purposes, such as providing a forum for self-regulation and quality control, nevertheless it is often suggested that they might facilitate collusion between existing industry players and the exclusion of new players.

Trade associations and collusion

5.28 The ways in which it has been suggested that Trade Associations might facilitate collusion include:

- Trade associations may publish statistics as to the prices and volumes which have prevailed in the market: this may allow firms to monitor deviation from an implicit or explicit agreement
- They may monitor general market conditions such as the drivers of demand, which may allow colluding firms to distinguish between a general market downturn and deviation from a collusive agreement
- If being a member of the trade association helps to acquire business (e.g. through providing certification) then firms which deviate from a collusive agreement can be threatened with expulsion, which might provide a punishment mechanism
- The trade associationmight facilitate the formation or maintenance of overt collusion.

[236] Address by Asst. Atty. Gen. Anne K. Bingaman, February 28, 1996, quoted in The Law of Associations, George D. Webster and Hugh K. Webster, 1975 (supp. 2002). Reference found at http://www.fraserlawfirm.com/Publications/Association/A-TrdAsAnt.html

Trade associations and entry barriers

5.29 Apart from their potential for facilitating agreements on prices or volumes traded, trade associations can also provide a barrier to entry. This can occur where membership of the trade organisation would provide a strong boost to demand: in some cases it may even be legally essential to trade. Where membership of the trade association is controlled by the existing market operators, there is an incentive for them to restrict entry by denying new entrants membership and possibly insisting on 'excessively high' standards.

Data sources

5.30 The British government maintains a list of trade associations which is accessible via the website http://www.taforum.org/.[237] In the context of a top-down study, the only information that is practically useable is simply whether or not an industry has a trade organisation.

5.31 As described above, it is clear that the precise effect that trade associations are having on a particular industry can only be determined by detailed examination[238]. One would need to know the particular activities that the trade organisation engages in, the information it publishes and so on.

5.32 The inference is that, all other things equal, one would select an industry with a trade organisation for investigation above an industry without one, but we doubt that this is likely to add a great deal to the efficacy of the top-down methodology.

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[237] The full list of trade associations kept by the government is available on http://www.taforum.org/searchgroup.pl?n=500&directory.

[238] Kirby (1993) notes that if a trade association does not contain all firms in a market then it may be more innocent as it could not be used to transfer collusion facilitating information to all the firms in the market. Such firms may be clarifying uncertainty as to the demand levels which will allow the correct quantity of a good to be produced for example.

Bidding Markets

Theoretical background

5.33 In a bidding market, sales are made through a tender process. Typically, the firm which supplies the tender will supply the entire tender, and the other firms supply nothing. These types of markets have very different characteristics from standard markets in which firms post prices and consumers divide themselves between the available suppliers. In particular, competition may be intense with only a very limited number of suppliers. For this reason, the existence of a bidding market is a commonly cited reason by competition authorities to tolerate the creation or maintenance of highly concentrated markets.

5.34 This is not to say that bidding markets are necessarily competitive, and so an indicator which merely registered whether a market took the form of a tender process would not be particularly useful. In general, competition in bidding markets is most likely to be intense where tenders are large, infrequently placed and there is a degree of confidentiality as to the outcome of the tender. Accordingly, the following questions are relevant:

- **Do the tenders represent a substantial fraction of the overall market?**

  Where tenders are large, the temptation to deviate from any coordinated arrangement will be correspondingly greater. For this reason, a measure that would be useful in this context is whether the tenders represent a substantial fraction of the overall market.

- **Are tenders infrequent?**

  Where tenders are infrequent, the punishment of any deviation from an agreement would be delayed, and accordingly more discounted. In these circumstances, again, coordinated behaviour is more difficult to sustain.

- How transparent is the outcome of the auction process?

  Another factor in determining whether coordinated behaviour is sustainable is whether the outcome of the bidding process is transparent. Transparency of the process has a number of dimensions:

  Identity of the winner. If the identity of the victor is kept secret than firms cannot retaliate against a firm which has 'won a contract out of turn'. This therefore makes punishing deviation more difficult and so weakens cartel behaviour.

  Details of the terms and conditions offered by firms. If details of the terms and conditions (in particular prices) are revealed, then this allows punishment for deviating from a cartel to be more accurately meted out. In addition, as costs can be credibly signalled by low cost firms bidding a low price, such information would allow a deviant firm to re-negotiate a more advantageous split of cartel profits.

- **Is the tender over immediately after the last bidding round, or is there scope for negotiation between a subset of the bidders?**

  If the winner takes all immediately after the last bidding round then deviating from a collusive agreement will award the business with certainty to the deviator. This acts to make collusion more difficult to sustain. On the other hand, subsequent negotiation provides scope for a cartel leader expecting to win a tender to react to a deviant low bid by a competitor. Such a format to a tender thus weakens the incentive to deviate from a cartel. To see this in more detail, suppose that suppliers A and B are in a cartel and firm A is the designated winner of the tender at some price p. If the tender were a one shot game then B would be tempted to bid just below p and so win the business. However, if there is a subsequent negotiation phase then such a deviation would see firm A informed and given the chance to respond. This would have two effects on firm B:

(i) If firm B did go on to win the tender it would be at a much lower price than p after an element of retaliatory price lowering. The benefit to winning thus shrinks.

(ii) It will be clear to all cartel members that B has deviated from the cartel and so firm B can expect punishment – whether or not it goes on to win the tender.

These two effects therefore act to bolster collusion and deter any deviation from collusion in the event that tenders are decided by subsequent negotiation after the bidding phase.

Data sources

5.35 There is, as far as we are aware, no cross-industry source providing an indication of whether markets are bidding markets in character. As described above ideally, in addition to information on whether the market was a bidding one or not, one would have information on the size of tenders, their frequency, transparency and the precise nature of the bargaining game.

5.36 We do not think that information on whether markets are bidding markets, and if so how competitive it is likely to be, can be incorporated into a top-down search although this is clearly an important factor in the bottom up analysis.

Mavericks

5.37 Mavericks are firms which are actively engaged in competition and seeking to grow their market share at the expense of their competitors. For this reason mavericks are typically firms which are currently of below average size. The presence of such maverick firms would break a cartel and can induce competitive behaviour: otherwise incumbent firms stand to lose their market share.

5.38 One way by which mavericks can be identified is to note which firms are actively engaging in market expansion activities more than proportionally to their size. This could be identified by the size of a firm's marketing budget and selling budget or, potentially more practically, by the ratio advertising spend/sales for example. If this figure was high for a small, as compared to a large, firm then it would suggest that the firm was behaving as a maverick. To allow the presence of mavericks to be detected we would propose the following indicator:

$$\frac{\text{Average [Advertising spend/sales] for the } \textbf{\textit{smallest}} \text{ firms supplying 25\% of the market}}{\text{Average [Advertising spend/sales] for the } \textbf{\textit{largest}} \text{ firms supplying 25\% of the market}}$$

5.39 If this fraction is smaller in one UK industry than compared to others, then this would suggest that there were no mavericks in this industry and competition may not be being spurred on by their actions. The evidence would be indicative but not conclusive as the averaging process may have disguised the true maverick, or the market may be strongly competitive and so large firms are actively trying to grow their market share also.

5.40 To calculate this fraction, firms in an industry would be ordered according to their size: $F_1 > F_2 > \ldots > F_N$ for example. If F_1 supplies over 25% of the market and F_N and F_{N-1} together also supply over 25% of the market, then the indicator would compare firm 1's ad/sales ratio against the average of firm N and N-1 together.

Constructing the indicator

5.41 Unfortunately the Advertising Association, the standard source of advertising information in the UK, does not provide information as to the ad spend of individual small companies. In addition, data on marketing budgets or advertising spend is not available from publicly submitted company accounts data such as that collected in the FAME database.[239] We are not therefore able to populate the maverick's indicator for the UK economy.

Diversion Ratios

5.42 The diversion ratio between products A and B is defined as: the percentage of consumers lost from A who would migrate to B, in the event of a price rise by firm A. That is, if A were to raise prices by some amount Δp and surveys suggest that for every 100 customers that A would lose, 20 of these would migrate to firm B, then the diversion ratio between firms A and B is 20% (20/100). Diversion ratios may be very different between products in the same market – this is because some products are more closely substitutable than other products. The key value of diversion ratios is that, if known, they may indicate that a subset of products in a given SIC code actually form a separate market.

5.43 SIC categories are normally broader than antitrust markets. Diversion ratios are one method by which an analyst might start to evaluate whether a given SIC code did contain multiple antitrust markets, and if so what they are. For example, if a subset of products (such as luxury cars) shared high diversion ratios then this would be indicative that the car market should be further subdivided when analysed for consumer detriment.

Data sources - surveys

5.44 Acquiring diversion ratios is difficult however as both price and volume information for individual products are required. One method which can be used to acquire the data is to conduct surveys as to how consumers view specific products, and which products they would substitute to in the event of a price rise. The drawback of this approach is that surveys

[239] FAME does contain a cost of sales variable. However, this accounting identity does not include selling or marketing expenses. (See the PwC website: http://www.pwcglobal.com/extweb/service.nsf/docid/e8cce447a15e406c80256c770054aceb)

can only be conducted concerning specific products – they are therefore of very limited value in conducting a top-down analysis in search of consumer welfare damaging practices across the whole economy.

Market Growth

5.45 Understanding market growth has value in any industry analysis as it provides an indication of the pace with which a market is changing. Though this is valuable, it is not clear whether market growth figures indicate a market is changing in favour or to the disadvantage of consumers

Market growth and the consumer

5.46 Market growth can have a number of economic effects which can act both for and against the consumer. We explore these below:

Market Growth Makes Entry Easier – In a rapidly growing market, there are likely to be a large number of new customers who have not as yet developed any allegiance to a company and who have no switching costs to incur in choosing one provider over another. In such situations new entrants can compete on close to equal terms[240,241] with incumbent firms and so make a greater success of entry. A growing market can therefore be seen as a market favourable to entry and so pro consumer as choice and competition increase.

Likewise, a market which is declining or stagnating may be more difficult to enter as a new firm will have to poach customers from the incumbent firms if there are switching costs.

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[240] A new entrant may still have a reputational disadvantage as compared to incumbents as its products are not 'tried and tested'.

[241] However, if a market is characterised by network externalities (such as telecoms or operating systems) then new entrants will not be on a level playing field even in a growing market. Network externalities imply that consumers care about which firms others have patronised, and so consumers prefer to group together. In such a situation the larger incumbent firms will still have the advantage over the new entrants and so market growth may not lead to successful new entry.

Market growth strengthens collusion – Collusion breaks down when firms decide that the benefits of deviating now and undercutting their rivals exceed the losses which result tomorrow when the other firms all lower their prices in punishment. In a growing market however, the punishment might be particularly acute as the price war could bite just when the market has grown and substantial profits could have been made as part of the collusion. A growing market may therefore act to bolster collusion as firms try to avoid antagonising their rivals in the hope of making substantial profits in the growing market. Likewise in a declining or stagnant market future punishments are mitigated as the size of the market will prevent the loss in profits being substantial. Collusion might therefore be more difficult to sustain in stagnant or declining markets.

5.47 The collusion and the entry effects act in opposite directions, one theory links growing markets with consumer detriment (collusion theory) while the other theory links market growth with consumer benefits (new entry theory). Symeonidis (2003) provides some empirical support, using UK data from the 1950s, for the contention that modestly growing markets can favour collusion, whilst collusion is less sustainable in very rapidly growing markets, potentially as new firms are more able to effect entry.

Indicators of market growth

5.48 The simplest indicator to capture is the average annual market growth calculated from the total value of goods sold by an industry. We have noted above that this indicator alone cannot be used to infer that consumer detriment is occurring (or not) just because a market is failing to grow. Nevertheless, such an indicator is useful as an insight into what weight to place on other indicators. For example, if a market is not growing rapidly then entry barriers may be a particular concern as a stagnant market with high entry barriers would indeed be a very difficult market to enter.

5.49 We have constructed this indicator by using the measure of the total industry turnover in the UK as acquired from the ONS Annual Business Inquiry data. This data is provided at the 5 digit level in the UK SIC

(1992) classification. To make this compatible with our other indicators, we have converted to UK SIC (2003) and the 4-digit level. The slowest growing markets are then given by:

Table5.2: 10 Slowest growing UK markets

SIC (2003)	**Industry**	**Average Annual Market Growth Rate % (98-02)**	**Rank**
1310	Mining of iron ores	-78.25	1
1823	Manufacture of underwear	-52.31	2
1320	Mining of non-ferrous metal ores, except uranium and thorium ores	-45.87	3
1725	Other textile weaving	-40.41	4
1010	Mining and agglomeration of hard coal	-39.58	5
2430	Manufacture of paints, varnishes and similar coatings, printing inks and mastics	-37.14	6
2664	Manufacture of mortars	-30.28	7
4512	Test drilling and boring	-25.39	8
2052	Manufacture of articles of cork, straw and plaiting materials	-25.17	9
9132	Activities of political organisations	-23.31	10

Source: Annual Business Inquiry data from ONS

5.50 We note that a second possible indicator would be the absolute difference between the market growth and some reference growth rate, say 2%. This indicator would seek to capture, in the light of Symeonidis (2003), that modest market growth favoured collusion whilst very large market growth encouraged entry. However, we have not pursued this indicator due to the arbitrariness of the reference percentage (2% in this example). In addition, it would be unclear why a stagnant market (0% growth) would be of equal concern as one growing at 4% for example.

Import Penetration

5.51 The presence of a substantial proportion of foreign imports in the UK market suggests the following:

- The relevant market is likely to be wider than purely national as foreign firms are already importing. This suggests that supply side substitution from abroad would be possible if the UK market were to see higher prices for any reason

- The UK focused indicator of concentration is likely to overstate the concentration as this indicator ignores the contribution made by foreign firms.

5.52 These two effects therefore suggest that import penetration is a useful indicator for consumer detriment: Markets with high import penetration are less likely to be worthy of investigation as they have the protection of supply side substitution from abroad.

Constructing the indicator

5.53 It appears most straight forward to use the ratio of imports to UK consumption when seeking to define an indicator for import penetration. This might be defined as:

$$\frac{\text{gross imports}}{\text{UK production} + \text{imports} - \text{exports}}$$

5.54 We sought to populate this using the ONS data provided in the UK Trade in Goods Analysed in terms of Industries dataset to provide the level of imports and exports. The UK production data (measured in value terms) was derived from the ONS Annual Business Inquiry.[242] However, this analysis resulted in a data problem: there were some industries where the measured export values were considerably higher than the UK

[242] Though this dataset does not contain turnover directly, it contains the C3 concentration and turnover of top 3 firms. Dividing the latter by the former gives the industry turnover.

production values for the same year.[243] This problem arises for at least two reasons:

- The data is not robust to re-exports; that is the practice whereby goods are imported into the UK and then exported on. In such cases imports may be booked in one year and the exports the next, resulting in over-estimates of UK consumption in the first year and underestimates in the following year. In addition, the value of the products may change whilst in the UK while remaining in the same SIC code.[244]

- There is a primary SIC code problem. The ONS Annual Business Inquiry data only books trade data in the primary SIC code in which a given firm operates. Therefore, if a firm operates in more than one sector, its trade in these sectors will not be included in the production data for those sectors. This causes UK consumption to be underestimated.

5.55 Given these complications, we have defined the following proxy for import penetration:

$$\frac{\text{gross imports}}{\text{UK production}}$$

5.56 This ratio is not now a percentage, as imports may well exceed UK production levels. The greater the value of the above indicator, the more competitive restraint exercised by foreign firms and so the smaller the potential for consumer detriment. Re-exports are not removed from the numerator, and so industries with very high levels of re-exports will appear to be benign according to this indicator. However, once such goods have been imported, they could be sold in the UK if the price were to rise substantially and so it is acceptable that industries with great levels of re-exports appear benign. The primary SIC code problem

243 For example, export values for 'Mfr for textile, apparel & leather' (SIC code 2954) was £341m in 1998 whereas production value was £39m in the same year.

244 For example textile materials may be imported without branding and then be re-exported having been branded and so acquiring a higher value.

remains however as the denominator assigns all a firm's production to the industry in which its primary activities lie.

5.57 The indicator for average import penetration can be constructed using the ONS data provided in the UK Trade in Goods Analysed in terms of Industries dataset to provide the level of imports. The UK production data (measured in value terms) was derived from the ONS Annual Business Inquiry.

5.58 Once constructed, the indicator highlighted the following industries as ones where there was no import penetration at all:

Table5.3: Industries Without the Protection Of Imports, 1998-2002

SIC (2003)	Industry
141	Quarrying of stone
142	Quarrying of sand and clay
150	Hunting, trapping and game propagation including related service activities
202	Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board, fibre board and other panels and boards
1120	Service activities incidental to oil and gas extraction excluding surveying
1730	Finishing of textiles
2221	Printing of newspapers
2223	Bookbinding and finishing
2225	Other activities related to printing
2231	Reproduction of sound recording
2232	Reproduction of video recording
2233	Reproduction of computer media
2664	Manufacture of mortars
2751	Casting of iron
2752	Casting of steel
2753	Casting of light metals
2754	Casting of other non-ferrous metals
2840	Forging, pressing, stamping and roll forming of metal; powder metallurgy
2851	Treatment and coating of metals
2852	General mechanical engineering
3330	Manufacture of industrial process control equipment
3710	Recycling of metal waste and scrap
3720	Recycling of non-metal waste and scrap
4020	Manufacture of gas; distribution of gaseous fuels through mains
4030	Steam and hot water supply

Source: ONS data

5.59 These twenty five industries are without any measured imports from abroad. Though this does not immediately imply that there is a consumer detriment, it does imply that there is no immediate competitive restraint exerted by foreign firms already in the market. Such firms may be able to enter the market if prices were to rise, but this would depend on the level of any entry barriers into these industries.

5.60 It should also be noted that there are a number of industries (such as Transport via railways) where there is no data on imports in the ONS dataset. For the purposes of the top-down aggregation procedure we have treated these industries as having zero imports.

Conclusion

5.61 This chapter has considered a number of miscellaneous indicators for consumer welfare detriments. Most of these indicators, although important, could only properly be evaluated in a more detailed bottom-up analysis. However, the existence of trade associations, the extent of import penetration and market growth can be implemented in a top-down analysis of the UK economy. Unfortunately however, the presence of trade associations is a binary indicator of weak value – what is more relevant are the actions of a given trade association rather than its existence. The average import penetration is of interest however as high import penetration would suggest that foreign firms are exerting a substantial competitive constraint on the UK industry, to the benefit of UK consumers.

6 BOTTOM UP METHODOLOGY

Introduction

6.1 The preceding chapters have described a top down methodology to screen for markets that might not be functioning effectively. The approach adopted there was to compute and then combine a number of indicators based on cross-industry databases: the output of the top down methodology is a number of sectors categorised by SIC codes or as in the OFT *Trends* publication.

6.2 There are however a number of limitations to this approach. First, sectors thus categorised are in general much broader than relevant antitrust markets and also contain a number of categories that may not be useful (such as government activities and eclectic groupings of items 'not elsewhere classified').

6.3 Second, the coverage of the cross-industry databases is not always complete and is rather aggregated in some instances (e.g. data in the Community Innovation survey is only available at the 1-digit level for all EU member states).

6.4 Third, cross-industry databases are in some cases not able to populate the indicators in a completely satisfactory way. For example, the information on market shares from the ONS relates to production data only, and the entire turnover of firms is allocated to the primary SIC code of a firm.

6.5 Fourth, there are many aspects of a proper market analysis which have not been captured by the top down indicators: for example price data on individual products is not available in cross-industry databases, although clearly pricing patterns are an important aspect of competition analysis (e.g. in an assessment of whether prices were excessive or predatory).

6.6 Accordingly, it is necessary to complement the top down methodology with a bottom up approach. The approach is designed to be able to perform the following tasks:

- *Identification of Markets.* Given a sector (as defined by 4-digit SIC code or as in OFT *Trends*) to identify what are the possible markets for investigation within that sector;

- *Data-gathering.* Given that a possible market for investigation has been identified, to gather data on that market; and

- *Assessment.* Using the data gathered on a market, to make an assessment of whether *prima facie* the market may not be working well for consumers.

6.7 The approach is designed to be applicable normally in a day for any given sector. It can be applied either in conjunction with the top down methodology (taking as its starting point a sector identified by that methodology) or on a stand-alone basis.

6.8 The methodology described in this section is therefore intended to cover all of these objectives. It outlines how one might go about obtaining market-specific information on entry barriers (e.g. licensing arrangements, economies of scale and scope, branding); market shares; concentration measures; price structure and price dispersion; costs; profitability; productivity; consumer complaints; customer search costs; after markets; bidding markets; commission payments; buyer power; and the geographical reach of a market. While the relative importance of these factors varies between markets, for completeness we have included a description of how to approach gathering information on all of these factors.

6.9 In order to facilitate rapid assessment of markets, we have developed a filter which can be applied on the basis of the data gathered at the previous stage to identify potentially problematic markets. As indicated above, we have designed the bottom up methodology and the filter in particular, to ensure that the analysis of a sector could normally be completed within a day (excluding the time taken in drafting the results).

6.10 The information sources that the bottom up methodology is intended to target include both Internet and non-Internet sources. Information of particular use will be company and trade association information, commentary and statistics produced by government and government agencies, market research, news articles and press releases, the academic literature, and previous competition cases.

6.11 The remainder of this chapter is structured as follows:

- Section 6.12 details the starting point of the bottom up analysis: identification of the specific market to be investigated
- Section 6.19 provides an overview of how one might go about locating relevant information for the market analysis, using primarily the Internet, but also some non-Internet sources
- Section 6.45 describes the process of gathering relevant market information. It draws on both the sources identified within Section 6.19, as well as suggesting a limited number of additional sources of use for specific indicators
- Section 6.96 details our 'assessment filter'. This is intended to draw together the analysis and research described in Sections 6.19 and 6.43, focussing the analysis so that an assessment can be made as to whether the market is likely to be functioning effectively.

Identifying the Markets to be Investigated

6.12 As detailed at the outset of this report, the objective of the top down methodology is to assist the OFT in identifying those markets that are more likely than others to have competition problems. These markets can then become the focus of the OFT's preliminary market investigations. As it has been designed however,[245] the top down methodology will tend to identify 'problem markets' as defined by either

[245] Owing largely to the datasets underlying the top down methodology.

the 4-digit 2003 Standard Industrial Classification (SIC) or the sector classification system adopted for the purposes of *Trends*. Unfortunately, in most cases, the sector categories adopted by these classification systems fall well short of properly defined antitrust markets. While it may not be required to get down to the level of a single relevant market, usually the SIC categories are too wide even for the purpose of identifying a useful cluster of related markets. So the initial step that must be taken is to 'drill down' into the results produced by the top down methodology in order to pin down more precisely the markets of concern. We envisage four distinct stages in this process.

6.13 First, we suggest that sectors which relate to the religious organisations, charities, government and other public service sectors should be removed. The precise scope of these exclusions is clearly controversial in view of the fact that the application of competition policy to sectors traditionally thought to be outside its scope (e.g. education and public procurement) has been growing. However, with respect to the different 4-digit SIC categories, the following categories might be excluded: 7521- foreign affairs, 7522 - defence activities, 7523 - justice and judicial activities, 7524 - public security, law and order activities, 7525 - fire service activities, 9131 – activities of religious organisations, 9132 – activities of political organisations, 9251 – library and archive activities, 9252 – museum and activities and activities of historical sites and buildings, and 9253 – botanical and zoological gardens and nature reserves activities, 6230 – space transport.[246]

6.14 Second, eclectic categories[247] need to be broken down. Some of these are reasonably focussed while some are very eclectic and may need to be discarded altogether. With respect to the 4-digit SIC categories, eclectic categories refers to categories such as 0125 – other farming of animals, 1450 – other mining and quarrying, 3162 – manufacture of other electrical equipment, 3663 – other manufacturing, 5190 – other

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[246] This is not intended as an exhaustive list. The sector categories are provided as examples only.

[247] That is, those labelled 'other', `not elsewhere classified' or other categories encompassing a broad range of different activities.

wholesale, 5248 – other retail sale in specialised stores, 5263 - other non-store retail, 7140 – renting of personal and household goods not elsewhere classified, and 7487 – other business activities. Within the *Trends* classification scheme, eclectic categories include CZ – other personal goods and services, DY – other professional services, and FZ – other recreational goods and services.[248]

6.15 We suggest such categories be investigated initially using the UK SIC 2003 descriptions,[249] in order to identify the items that lie within the categories. Where there are a relatively small number of activities, this will guide the search for relevant antitrust markets (as described below). However, where there is a large range of unrelated activities (e.g. the SIC category 5190 – 'other wholesale'), it will be necessary to discard the category entirely.

6.16 Third, before beginning detailed analysis of a sector, the sector category should be mapped to an (potential) antitrust market (including both product and geographic dimensions). It is the antitrust market that should be the focus of the analysis (not the sector category, per se). A relatively quick and effective way to get a handle on the likely relationship between a SIC or *Trends* sector category and an antitrust market is with reference to past competition cases. On its website, the European Commission lists past merger decisions according to NACE codes, which closely reflects the SIC classification system.[250] Therefore, past decisions can be browsed by industry code, facilitating ready review of market definitions. We recommend that the focus of the bottom up analysis should be the most common market definition adopted by the Commission and relevant to the sector category.

6.17 There are two limitations with this relatively simple approach. First, it is likely that many of the decisions listed on the Commission's website will

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[248] Again, this list is not intended as exhaustive.

[249] Available at http://www.statistics.gov.uk/methods_quality/sic/downloads/UK_SIC_Vol1(2003).pdf

[250] The list of merger cases sorted by NACE code is available at: http://europa.eu.int/comm/competition/mergers/cases/index/by_nace.html

not consider or conclude on market definition. Others will only be available in a language other than English. In such cases, it may be necessary to undertake a further search of competition cases. We suggest a general Internet search for this purpose, which may encompass decisions of the European Commission, the UK Competition Commission and other competition authorities around the world.[251] Second, a review of competition cases may conclude that there are several (narrowly defined) markets relevant to the sector category (e.g. for transport sector categories, market definitions may reflect specific transport routes; or for broader manufacturing categories, market definitions may reflect the production of very specific goods). If at all possible, we suggest returning to the top down datasets to investigate whether one or two of these narrowly defined markets are more relevant than others (e.g. whether certain goods or services within the sector category attract more consumer complaints). If this proves to be impractical, then, if feasible, we suggest investigation of each of these narrow markets using the bottom up methodology. Once again, if this is impractical (e.g. if there are still a very large number of unrelated markets), then we suggest abandoning analysis of the sector category.

6.18 We expect the output of this initial step to be the identification of a group of activities that reflect a SIC/*Trends* sector category of interest and which broadly constitute a market. These activities are to be the focus of the market analysis. In the remainder of this section, however, rather than referring to the term 'market', we continue to adopt the term 'sector' as the group of activities is likely to reflect an antitrust market only loosely.

Identifying Relevant Information Sources

6.19 This section gives a description of how to identify relevant information from eight sources. The following section, Section 6.43, details how to use this information with respect to each of the indicators.

[251] For example, by adopting search words such as 'competition' and 'commission' and one or two terms to describe the sector category. Searching within the Europa site, using search terms to reflect the sector category, does not produce particularly helpful results.

Source 1: Trade/Industry Association Websites

6.20 As a first step, we recommend visiting the website(s) of the trade or industry association(s) for, or most related to, the market in question.[252] In most cases, the website(s) will feature useful information for the market analysis, including the names of the main industry participants, a broad description of the sector, market research, and links to other related websites. We suggest this as a first step, as the information contained on the websites will often provide a foundation for further research.[253]

6.21 In order to identify the most relevant industry association(s) and its website address(es), we suggest an Internet search using the google search engine[254] and the following key words:

- '[relevant sector]'[255] AND 'association'[256]
- '[relevant sector]' 'federation' OR 'foundation'[257]
- '[relevant sector]' trade organisations
- '[relevant sector]' trade organizations

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252 More than one trade association may be relevant. For example, the footwear sector has at least 7 potentially useful trade associations (including the global International Footwear Association and SGMA International; British-based, the British Footwear Association and the Independent Footwear Retailers Association; and US-based, the American Apparel & Footwear Association, the Sports Textiles & Footwear Association, the Athletic Footwear Association, and Fashion Footwear Association of NY).

253 For example, the main suppliers' websites, the addresses of which should be available on the trade association website.

254 http://www.google.co.uk/

255 This search term is explained in the following paragraph.

256 Or if this search is of limited success we suggest the search: '[relevant sector]' AND 'trade' AND 'association'.

257 Or if this search is of limited success we suggest the search: '[relevant sector]' AND 'trade' AND 'federation' OR 'foundation'.

- '[relevant sector]' industry organisations
- '[relevant sector]' industry organizations.[258]

6.22 The most appropriate choice of search term for the sector will inevitably be determined through trial and error. We recommend beginning with a relatively generic term to describe the market being investigated. If this does not produce the desired listings, the term should be broadened or narrowed accordingly.[259,260]

6.23 One final step before finalising the list of relevant trade associations, as a supplement to the google search, we suggest a cross check of trade associations against a secondary source. There are a number of websites detailing trade associations by sector that would be useful for this purpose.[261]

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[258] We have included 'organization', as a suggested search term to ensure the Internet search captures all US-based and international/global trade associations. While it may be the UK or European market sector that is of most interest, the US-based or global trade association sites are also likely to contain useful generic information about the sector (e.g. emerging technological trends in the sector, growth, etc). They may also provide an indication of the geographical reach of the sector.

[259] For example, an appropriate starting point might be the term 'pet food', if one is trying to find material relevant to the market for 'cat food manufacturing'. If the initial search does not produce the desired listings, then the term could be broadened to 'pet food manufacturers' or 'pet food manufacturing', or narrowed to 'cat food'. Similarly, if one was investigating the market for wine production, 'wine' may be an appropriate starting point (although 'winemakers', 'wine producers', might also be appropriate). It may then be appropriate to further narrow the search so that the search excludes terms such as 'home', 'club', 'amateur', 'family' or 'tourism'.

[260] Throughout this chapter we refer to the sector search term. While we refer to it as a generic term, we note that slightly different search terms (i.e. narrower or broader terms) may need to be adopted for each step in the research methodology (in order to produce the best search results in each case). At each step, we suggest using a number of versions for the sector search term.

[261] For example, the Trade Association Forum's website enables the viewer to search for trade associations relating to a particular sector. Simply enter the sector search term in the key word search at: http://www.taforum.org/searchgroup.pl?n=500&directory

The website 'British Companies' is also helpful in this regard. See: http://www.britishcompanies.co.uk/index.htm

6.24 Once the relevant trade association(s) have been identified, each organisation's website should be reviewed for information. The following types of information should be noted:

- names and, if possible, the website addresses of the main participants in the sector. These details are most frequently recorded at the 'members details' section of the website
- generic information about the sector (e.g., descriptions of the sector's history and growth, and major changes that have occurred in the sector (technological, new market entry, etc)). This type of information is often available by way of a marketing brochure, in the 'frequently asked questions' section of the website, or some websites might have specific sections describing the characteristics of the sector
- regulatory features of the market (licensing requirements, legislative constraints on market participants, etc)
- industry statistics, including revenues, volumes sold, industry growth, and (in some cases) market share information. These will be contained within the website (either by way of an annual paper or report, or a specific section of the website such as 'facts and figures' or 'statistics'), or alternatively links may be provided to third parties' websites containing such information.

Source 2: Government and Government Agency Sources

6.25 Government departments and agencies are often a good source of information about specific sectors. These entities will maintain statistical series, collate background information about the sectors for which they are responsible, and conduct investigations of specific sector(s) prior to reaching policy decisions affecting that sector(s). This type of information will often be available directly via their websites.

6.26 To identify the UK government department(s) responsible for a particular sector, as a first point of call, we recommend the government summary document 'Sponsorship by Government Departments'.[262] It provides a list of sectors (and sub-sectors) and the designated UK government department(s) responsible. While the source document is over five years old[263] (and therefore contains one or two outdated government department titles), the listed department names can be used as a search term in google, which will identify the current title and website of the relevant government department.

6.27 Once the website address for each government department responsible for the sector has been obtained, the material relating to the sector on the website should be reviewed. Information that is likely to be of particular relevance includes: general information about the sector (e.g. the main suppliers and their customers, general descriptions of the goods or services, etc), and information about regulation of the sector (such as licensing, bans on advertising, etc). Reports or website summaries may even detail market shares or penetration, the level of market concentration, profitability levels, cost structures and levels, productivity levels, expected and past market growth, and other major market trends/changes. All of this is relevant for the market analysis, as discussed further in Section 6.43.

6.28 Once the list of departments identified by using the summary document has been exhausted, we recommend two supplementary searches to identify potentially omitted UK government departments or agencies with a role in the sector:

- a search using the UK government portal,[264] and the sector search term

[262] http://www.archive.official-documents.co.uk/document/caboff/compet96/annxb.htm

[263] It was published in 1996.

[264] http://www.ukonline.gov.uk/Home/Homepage/fs/en

- a search of National Statistics online,[265] using the sector search term.

- To the extent that activities in the sector outside the UK is relevant, we also recommend a review of the information sources developed by European and International government agencies.[266] For instance, we recommend the following searches:

- a search of the European Commission's website,[267] using the sector search term.[268] Statistical series published by Eurostat should also be reviewed for relevance.[269]

- a search of the OECD website, using the sector search term.[270] Statistical series published by the OECD should also be reviewed for relevance.[271]

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265 http://www.statistics.gov.uk/default.asp

266 A complete list of international government agencies is available at http://cs3-hq.oecd.org/scripts/stats/source/alpha.asp?Let=INT. In most cases, however, a review of the European Commission's and OECD's websites is all that is required. Other international organisations do not generally produce sectoral information, with the key exceptions of water, communications, transport, or health sectors. If one of these sectors is being reviewed, then we recommend a brief trawl of other international government agencies, such as the United Nations. Website addresses are provided in website address noted previously.

267 http://europa.eu.int/geninfo/query_en.htm

268 If the search results are too broad, then the search should be narrowed by adding the search terms 'industry' or 'sector'. This will tend to narrow the search results by omitting documents which do not relate specifically to industry/sector issues.

269 http://europa.eu.int/comm/eurostat/Public/datashop/print-catalogue/EN?catalogue=Eurostat

270 If the search results are too broad, the search should be narrowed by adding the search terms 'industry' or 'sector'. This will tend to narrow the search results by omitting documents which do not relate specifically to industry/sector issues.

271 The statistics published by the OECD are listed at: http://www.oecd.org/statsportal/0,2639,en_2825_293564_1_1_1_1_1,00.html.

Source 3: Suppliers' Websites

6.29 The next sources we suggest for the market analysis are the websites of the five 'largest' suppliers in the sector.[272] The main suppliers operating in the sector are likely to have already been identified. Almost all trade association websites, in particular, will provide the names of their members (and hence the names of the main suppliers).[273] To confirm the five largest suppliers, the simplest and most direct method is to consult Hoovers' online.[274] Hoovers Online lists the ten main suppliers operating in each sector, and then in the descriptive text for each company Hoovers will reveal its significance or place within the sector. If the five largest suppliers cannot be pinpointed using Hoovers, rather than investigating further sources, we suggest a review of the websites of each of the suppliers listed within Hoovers (up to perhaps a maximum of eight suppliers). If Hoovers' Online proves unsuccessful in identifying relevant suppliers, then we suggest further investigation of material on the trade association or government websites. Material will often indicate which are the largest suppliers in terms of revenue and volumes sold.

6.30 Once a list of the main suppliers has been compiled, each of their websites should be reviewed.[275] The suppliers' websites may contain descriptive material detailing the key characteristics of the sector (e.g.

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[272] For sectors with a large number of suppliers (such as the used car sector or trade sectors), identifying five main suppliers may not be practical (or particularly meaningful). In such cases, we suggest either omitting a review of suppliers' websites, or, if possible, a review of five 'typical' suppliers' websites.

[273] For example, the Pet Food Manufacturers' Association's website provides the names of its 50 member companies. The association reports that these collectively represent around 95 percent of the 'UK pet food market'. See: http://www.pfma.com/PFMA%20Members%20List.htm

[274] Hoovers 'industry directory' can be found at: http://www.hoovers.com/free/ind/dir.xhtml

[275] The trade associations' websites will often give website addresses for their members. Hoovers online will also, in most cases, provide the company website. If company websites are not provided within these sources, then the address can usually be found by way of a simple Internet search using google (using the market participant's name as the search term). If the company is particularly small, it may not have a website. In those instances, the parent company website may contain relevant information.

when each of the suppliers entered the sector, broad details about any mergers that have occurred, the market penetration of each of the suppliers, sector growth (actual and anticipated), the importance and implications of technological progress, the significance of branding, and the international presence of the suppliers).

6.31 Particular attention should be paid to the suppliers' annual reports and financial statements for relevant information.[276] For example, revenue and volume information listed in the company's financial statements may be useful for market share calculations (see Section 6.50). Similarly, RandD expenditure and capital expenditure may help to inform conclusions on entry barriers (see Section 6.55). The commentary within the annual report (such as the Chairman's or CEO's report, or the 'market outlook' or 'the year ahead' section) may also contain information, detailing major changes that have occurred or are expected in the sector (e.g. market entry, merger activity, or recent cost or product innovations), and key financial improvements that have occurred (indicating the general health of the company, and possibly the sector in general).

6.32 Other material on the website that should be reviewed includes:

- speeches and presentations by the company CEO and/or Chairman. These often contain estimates and projections of revenue, profitability, productivity, growth, and 'challenges' facing the company[277]

- corporate 'management reports' or 'operational reports'. If available, these may provide further useful financial information about the company

[276] Annual reports and financial statements are commonly found in the 'investor relations' section of corporate websites (or alternatively in the 'about us' section).

[277] These may be of particular use if the company in question is a subsidiary. While annual reports and financial statements often only contain highly aggregated data, CEO/Chairman often give presentations relating specifically to subsidiaries.

- company press releases. These will also report general indicators of company health, including annual financial results, recent management appointments, and merger activity.[278]

Source 4: Previous Competition Case Material

6.33 Material relating to competition investigations will provide another potential source of sector-specific information for the market analysis. Reports by competition authorities, for instance, will contain background information on the sector and market participants, and also an indication of the likely effectiveness of competition within the sector.

6.34 As a first step, to identify the relevant European cases, we suggest a review of cases listed within Richard Whish's *Competition Law*.[279] Following the table of contents, Whish lists all of the reports published by the Competition Commission and the OFT, and the decisions of the European Commission, the Court of First Instance and the European Court of Justice. The list of reports and case titles can easily be reviewed in order to determine their relevance. On finding a relevant case, the court or commission decision can be accessed via the relevant website (as detailed further below).

6.35 As a supplement to this research, and to help identify past cases in other non-European jurisdictions, we suggest a search of the following competition authorities websites:[280]

- UK Competition Commission[281]
- European Commission[282]

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[278] Again, we would expect these to be of particular use if the company in question is a subsidiary.

[279] Whish, Richard, *Competition Law*, 5th Edition, Butterworths, 2003.

[280] The website may be searched using the sector search term and/or the supplier search terms. Material relating to both merger and competition policy/antitrust cases should be reviewed.

[281] http://www.competition-commission.org.uk/index.htm

[282] http://europa.eu.int/comm/competition/index_en.html

- Department of Justice[283]
- Federal Trade Commission.[284]

6.36 Relevant material relating to past investigations by the OFT should also be reviewed.

6.37 To identify relevant antitrust and merger cases, each website should be searched using the names of suppliers in the sector. Searching using the sector search term may, in some cases, also locate relevant cases.

6.38 In addition to these general competition authorities, to the extent that they are likely to be active in the sector being investigated, we also recommend a review of the websites of the UK sector regulators such as Ofcom,[285] Ofwat,[286] Ofgem,[287] and Postcomm.[288] That said, these sources might already have been identified on review of government agency websites.

Source 5: Academic Literature

6.39 The academic literature may be another useful source of information for the market analysis. In particular, academic research is likely to provide concrete evidence of structural features of the market and their implications for competition. To identify papers which are relevant to the sector being investigated, we suggest a search using two commonly used databases of economic literature: EconLit[289] and WOPEC.[290] At

283 http://www.usdoj.gov/atr/tools/search.htm

284 http://www.ftc.gov/

285 http://www.ofcom.org.uk/

286 http://www.ofwat.gov.uk/aptrix/ofwat/publish.nsf/Content/navigation-homepage(ofwat)

287 http://www.ofgem.gov.uk/ofgem/index.jsp

288 http://www.postcomm.gov.uk/Index2.html

289 EconLit is the American Economic Association's electronic bibliography of economics literature.

290 WOPEC is essentially an online searching facility that allows a user to identify and download recent academic research. It draws on the RePEc (or Research Papers in Economics) public-

first, we suggest a simple search using the sector search term. This is relatively quick and may be sufficient to identify relevant papers. However, if this search produces too many records, then we suggest refining the search by systematically adopting each of the indicators as additional search terms (e.g. barriers to entry, economies of scale, productivity, profitability, etc).

Source 6: Press and News Items

6.40 News items will often contain material relevant to the market analysis. For example, they are an immediate and up to date source of information on recent acquisitions and divestments, intended market expansions or contractions, senior management appointments, end of each year of financial results, and major changes in market trends.

6.41 To identify relevant news items, we suggest a search using google news,[291] and adopting the names of suppliers and the sector search term. The search should target news items for the most recent three-month period. The search is likely to identify items that contain descriptions of major changes in the industry (of the type described above).

Source 7: Market Research Reports/Analysis

6.42 The final information source we recommend is market research and financial analyst reports. These papers will provide key details about the industry and are therefore a very useful source of information for the market analysis. A drawback is that the vast majority of these reports or databases will only be available, in full, if purchased.[292] We

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access database, which contains bibliographic information on 122,000 working papers published by institutions and individuals, bibliographic citations for 91,000 articles from leading journals in economics, and bibliographic citations for 750 books and chapters. See: http://netec.mcc.ac.uk/WoPEc.html

291 http://news.google.co.uk/news?hl=en&edition=uk&ie=ascii&scoring=d&q=

292 Although, advertisements for the reports on the market research companies' websites will often be accompanied by summaries or abstracts.

understand however that the OFT already subscribes to a number of these sources (e.g. Key Note, Mintel, and Euromonitor's reports).

6.43 Table 6.1 contains a summary of the sources of market research information which we consider most useful.

Table 6.1: Market Research Sources

Source	Description
Euromonitor's Major Market Profile series[293]	Provides accurate and affordable data for 156 different industries and 744 individual markets across retail and consumer good sectors. Reports are particularly useful for market share information, information on market growth and new product entry, and detailed profiles of the companies operating in the sector. The website features a brief summary of these reports free of charge.
Euromonitor International's company and industry profiles[294]	Offers immediate and more detailed information on individual companies and individual sectors, at both national and international levels, compared to the market profile series. The website features a dropdown menu allowing the user to search the reports available easily by both sector category and company name. It also contains the table of contents for each report.
Mintel[295]	Produces over 600 market research reports per year, covering an extensive range of sectors, within Europe and specifically in the UK. Reports detail market sizes and trends, market drivers, advertising and promotion details, and customer attitudes and preferences.

293 http://www.majormarketprofiles.com/

294 http://www.euromonitor.com/

295 Mintel's reports are listed at: http://reports.mintel.com/sinatra/mintel/reports/, and Mintel's databases are listed at: http://reports.mintel.com/sinatra/mintel/databases/4&1120#1

Source	Description
Key Note's Company and Market Analysis[296]	Provides a search facility which allows the user to obtain company and industry information. The databases underlying the service are updated daily, and the service is well suited to providing in-depth information on companies and sectors. The information is structured according to SIC and NACE codes, and is available on a 'pay on demand' basis.
Key Note[297]	At the time of writing, Key Note had 380 market research reports on offer, covering 27 sectors, ranging in analytical depth. Information contained in reports includes company accounting information, advertising outlays, and the number of suppliers in the market. The 'report gallery' section of the website allows the user to browse the available reports alphabetically by title. A lengthy summary of each report is also available on the website.
Snapshots International[298]	The majority of Snapshots' reports focus on national markets for consumer goods (e.g. microwaves, computers, tobacco, furniture, etc). Reports are also available for a limited range of service sectors such as holiday-related, utility, postal, and a limited number of niche business services. Reports detail market size and market shares. The list of reports on the website is structured by sector, and a table of contents is provided for each report.

[296] http://www.keynote.co.uk/GlobalFrame.htm

[297] These can be accessed at: http://www.keynote.co.uk/GlobalFrame.htm

[298] http://www.snapshotsinternational.com/index.php?module=industry

Source	Description
ProspectSwetenhams' Business Ratio Reports[299]	Provide a financial evaluation of a number of UK industry sectors. The reports compare and contrast the financial performance of the leading companies in each sector, and contain details including a sector overview, company profiles, profit and loss details, and key business ratios. The website contains a list of reports, which is structured by sector category. Report summaries are not available free of charge.
Plimsoll Publishing[300]	Offers current financial analysis of over 900 sectors in the UK. The analysis is reported to include an analysis of every company that is relevant to the sector, and offers details about the health and commercial successes of those companies. Reports cover a very broad range of sectors, and are searchable on Plimsoll's website using a menu of sector categories. Brief highlights of each report is available free of charge from the website.
AMA Research[301]	Offers a range of market research reports and databases focussing on relatively niche sectors, not commonly offered by other market research companies. The sectors covered relate to domestic furniture, and home building and construction activities such as double glazing, construction of domestic conservatories, and gardening activities. Reports are primarily UK focussed, and provide details of main suppliers, market shares, size, performance, and trends. The website features a menu of sector categories allowing the user to search the reports available. Only a brief extract of reports is provided, but the websites does feature a table of contents for each report.

299 http://www.prospectswetenhams.com/services/publications/about.jsp

300 http://www.plimsoll.co.uk/

301 http://www.amaresearch.co.uk/Index.htm

Source	Description
US Securities and Exchange Commission[302]	The SEC's website allows users to download company filings. Filings will include company annual reports, and other documentation containing financial details about the company. Relevant filings on the website can be located by searching by company name.
Hoovers online	The website contains, for listed companies, a commentary about the company, offering details such as the company's market position, its key competitors, other products it produces or sells, and its related companies. Further information is available for purchase.
Carol[303]	Offers a database of European and US based companies' annual reports and other corporate information. The website allows a user to search for company information by company name, sector and/or by geographical region. Basic company information is available for free, but users must register before being able to download information. Further information is also available for purchase.
Factiva[304]	Provides, for publicly listed companies, a brief description of the company (e.g. operational size, key markets, and key competitors), financial information (e.g. revenues, share information, net profit margin), current news items/trade reports involving the company, and it will also identify market analyst reports about the company (available for download).

302 All listed companies are required to file registration statements, and other documentation electronically through 'EDGAR' the SEC's Electronic Data Gathering, Analysis, and Retrieval system. Company filings are available for 1993 through 2004, and are available for download at: http://www.sec.gov/edgar.shtml

303 http://www.carolworld.com/index.php

304 Further information about Factiva is available at: http://factiva.com/products/research/index.asp?node=menuElem1488. LexisNexis is an alternative product, and offers similar features to Factiva.

6.44 If these sources fail to identify relevant market research or analyst reports, then we suggest one additional search. International Market Research Information (IMIR) maintains a database called DataStar, which contains market research firms with particular expertise in a sector. This database can be accessed via their website. It provides a list of firms (and their websites), which users can review to determine whether they contain relevant information.[305] IMIR also offer a search service to identify market research reports relevant to a particular sector. This service is also accessible via their website.

Collating the Market Analysis

6.45 This section contains a summary, by indicator, of the way in which each of the information sources listed at Section 6.19 can be used. At the outset, we note that market research and past competition cases are likely to be useful sources for each of the individual indicators discussed below. Market research will often provide indirect or 'soft' evidence (e.g. commentary referring to 'advantages' held by an existing firm(s), or general discussions of profitability and productivity), while competition cases will often discuss the indicators explicitly, collating evidence where available. We do not mention these potential information sources again in the following sections, except where they are one of few suitable sources or less useful.

Key Industry Facts

Suppliers

6.46 Basic information about suppliers operating in the sector will provide important contextual information for interpreting other indicators (e.g. market shares and concentration, barriers to entry, and profitability). The facts that should be extracted from source material are:

- the total number of suppliers operating in the sector

[305] See http://www.imriresearch.com/

- the names of the five largest suppliers operating in the sector
- details about whether the five largest suppliers are subsidiaries of parent companies
- brief details about each of the five largest suppliers, including the goods or services offered by each of the suppliers, the date the supplier entered the sector, the customers served or targeted
- details about recent structural or management changes for each of the suppliers (e.g. divestments, mergers, major management changes, or labour cuts).

6.47 This information is likely to be contained within material sourced from trade associations (e.g. 'information sheets' or 'facts sheets' about the sector, or press releases), government agencies (e.g. briefing papers or 'fact sheets' about the sector), suppliers (e.g. commentary within annual reports, company bios and product descriptions available on the website, CEO and Chairman presentations, company press releases), and market research companies (e.g. Hoovers online, or the sector reports available from the market research companies listed within Table 6.1).

Buyers

6.48 The number and nature of buyers operating in the market will provide further contextual information for interpretation of other indicators (e.g. in relation to buyer power, barriers to entry, pricing, and bidding markets). The following questions are relevant to the market analysis:

- who are the main buyers of the goods or services? If there are numerous buyers, then is the sector characterised by a number of key customer segments (e.g. residential or business)?
- who are the five largest buyers of the good or service?
- do buyers tend to purchase from one or more of the suppliers?

- what proportion of suppliers' total unit volumes and revenues are attributable to the five largest buyers?

- do buyers purchase the goods or services collectively (e.g. retailers may purchase from manufacturers as a collective)?

6.49 The more general questions relating to the nature of buyers and customer segments should be answerable by using information in general descriptors of the sector.[306] If the buyers are very large, the names of buyers will be identified in market research reports (e.g. the sector reports available from the market research companies listed within Table 6.1). Large contracts won by suppliers are also likely to be reported in suppliers' press releases. The corporate website of each buyer will provide further details about each of the buyers (i.e. as detailed in Section 6.29 for suppliers).

Market Shares and Concentration

6.50 Market shares, both on a static basis and their development over time, are widely used proxies for the degree of competitive pressure in a market.

6.51 One of the better sources of quantitative information for estimating market shares is suppliers' annual reports (see Section 6.29). If suppliers are multi-product firms (or subsidiaries of parent companies) however, revenues will commonly be reported on an aggregated basis, making annual reports less useful. Alternatively, revenue and volume data may be reported in CEO or Chairman presentations, or other management or operational reports made available to investors via corporate websites.

[306] As noted earlier, general descriptors of the sector will be contained within material from trade associations (e.g. 'information sheets' or 'facts sheets' about the sector), government agencies (e.g. website summaries of the sector, briefing papers or 'fact sheets' about the sector), and market research companies (e.g. Hoovers online, or the sector reports available from the market research companies listed within Table 6.1).

6.52 Other material may report actual estimates of market share or market concentration, or offer qualitative information.[307] For instance, past competition cases and market research reports will commonly report market shares or concentration measures. Trade associations may report the market share held by their members (or a sub-set of their members). News items or suppliers' press releases may make claims that a particular supplier has a strong market presence (e.g. references to 'unassailable' market positions).

6.53 To supplement the information described in Section 6.12, we suggest a further general Internet search for market share information.

6.54 In a number of cases in this section we recommend general Internet searches to locate further information. A useful technique is to use the google search engine, together with the sector search term and a term to reflect the indicator (e.g. in this case, terms such as 'market shares', 'HHI' or 'market concentration'). Adding the name of one or more of the suppliers in the sector will further hone the search.

Barriers to Entry

6.55 Barriers to entry include: high sunk costs, stringent licensing requirements, access to scarce inputs, economies of scale or scope, and intellectual property rights. Each of these is discussed in turn below. Customer switching costs, another potential entry barrier, is considered separately in Section 6.84.

Presence of Sunk Costs

6.56 The question is whether it is necessary to incur high sunk (that is, unrecoverable) costs to operate in the market. Important examples are expenditure on advertising, RandD and non-coverable capital expenditure.

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[307] The information will be useful as both a cross check of market shares estimates and as an alternative to market share estimates (if revenue or volume information is not readily available).

6.57 Potential data sources are:

- annual reports of the five largest suppliers
- academic research on sunk costs, or the capital intensity of the sector more generally (e.g. Sutton's *Sunk Cost and Market Structure* and *Technology and Market Structure*).[308]

6.58 To the extent that these sources do not produce sufficient information, then we recommend a further general Internet search.

Licensing arrangements

6.59 Firms may require a licence before they are able to operate in a sector. The relevant question is whether the procedural arrangements for acquiring licences are particularly onerous or costly. For example, would it take more than a year to obtain a licence, or is the cost of obtaining a licence significant? Alternately, do licensing arrangements limit entry, per se?

6.60 The potential information sources for this indicator are:

- the Institute of Licensing's website[309]
- government department or agency material (e.g. explanations of licensing arrangements within general descriptors of the sector, discussion or policy papers about limitations or proposed changes to arrangements)
- trade association websites (e.g. general descriptions of licensing arrangements, lobbying briefs concerning licensing arrangements).

Regulatory arrangements

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[308] Sutton J., *Sunk Cost and Market Structure*, MIT Press, Cambridge, 1991; and Sutton, J., *Technology and Market Structure. Theory and History*. MIT Press, Cambridge, 1998.

[309] http://www.lglf.org/

6.61 Planning or building restrictions, import controls, or other regulatory arrangements limiting entry are also relevant. Trade association or government departments websites are potential information sources for this indicator.

Access to scare inputs

6.62 Entry may be hindered if existing firms hold privileged access to one or more inputs such as finance, distribution facilities,[310] land or property in a highly desirable or superior location, or intellectual property rights. These may be attributable to vertical integration, parent subsidiary relations, or first mover advantage.

6.63 The potential information sources are:

- suppliers' websites (e.g. the corporate profile section will detail the nature of relationships between the parent company and its subsidiaries; the section on the supplier's 'partners' will often contain information about distribution arrangements)
- news items (e.g. reporting a lucrative land or property deal)
- the UK Patent Office's website.[311]

6.64 If these sources do not offer sufficient information then we suggest a general Internet search.

Economies of scale and scope

6.65 The relevant question is whether production costs exhibit economies of scale or scope. The academic literature or past competition cases are likely to be the best sources of empirical evidence. Market research may also provide indirect evidence (e.g. commentary indicating that

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310 For example, one firm may operate a more mature and superior distribution system, or may able to gain relatively advantageous terms and conditions for use of the distribution system.

311 http://www.patent.gov.uk/index.htm

production costs are significantly fixed, or that individual firms have captured certain 'synergies'). If these information sources offer insufficient information then we suggest a general Internet search.

Brand Image

6.66 Entry may be hindered if existing firm(s) exhibit a strong brand image. Important indictors of strong brands are high levels of advertising or sponsorship expenditure, novel product attributes, and customer loyalty.

6.67 Potential information sources are:

- suppliers' websites (which will list their brand names, and offer product descriptions)
- annual reports of the five largest suppliers (which will report advertising or sponsorship expenditure details)
- consumer research or surveys on brand loyalty (these are often available on trade associations' or suppliers' websites)
- academic material on branding and customer loyalty.

6.68 If these information sources offer insufficient information then we suggest a general Internet search.

Exit Barriers

6.69 The question is whether firms would incur significant costs if they were to withdraw from a market. This might be attributable to, for example, inflexible labour contracts or legal obligations to leave production sites in a specific condition.

6.70 Details of exit barriers may be contained in general descriptors of the market (e.g. sourced from trade association or supplier websites), although past competition cases and academic research on exit barriers are likely to be the most immediate sources of information. If these sources offer insufficient information then we suggest a general Internet search.

Barriers to Expansion

6.71 The question is whether features of the market restrict or hinder firms from expanding production levels. Important indicators are capacity constraints in production, or limited access to necessary inputs. Again, details of potential barriers may be contained in general descriptors of the market (e.g. sourced from trade association or supplier websites), although market research reports and past competition cases are likely to be the most useful information sources.

Prices

6.72 Suppliers' websites are the first point of call for current prices. If price data is limited, then we suggest the websites of larger department stores or specialist Internet-based merchants. Most consumer goods and services are available for purchase on the Internet (including domestic appliances, furniture, clothing, toiletries and cosmetics, books and magazines, DIY equipment, transport (including air fares, rail fares, and car hire), holiday and non-holiday accommodation, telecommunications, energy, and credit services). Key exceptions will be sectors involving construction, manufacturing or wholesaling.

6.73 The following websites contain price information for general consumables:

- Price Runner[312]
- Price Grabber[313]
- Kelkoo[314]
- UK Shopping Guide[315]

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[312] http://uk.pricerunner.com/

[313] http://www.pricegrabber.com/index.php

[314] http://www.kelkoo.co.uk/

[315] http://www.shopping.net/

- ZD Net[316]
- Price Guide UK[317]
- Doo Yoo[318]
- uSwitch.[319]

6.74 Similar websites can easily be identified by way of a general Internet search.

6.75 Other potential sources of pricing information (including historic information) are:

- discussion papers by government departments or agencies (these may contain international price comparisons)
- annual reports, discussion papers or press releases by trade associations (e.g. trade associations often maintain price indices which are reported in their annual reports; discussion papers or press releases may also contain price comparisons with substitute products or services, or commentary on major price changes within the sector)
- market research reports (e.g. these may include general information about how and why prices have changed over time)
- the Consumers' Association website (e.g. campaigns and product research on pricing related matters)[320]

[316] http://www.zdnet.co.uk/

[317] http://www.priceguideuk.com/index.asp

[318] http://www.dooyoo.co.uk/

[319] http://www.uswitch.com/index.asp?ref=commissionjunction

[320] http://www.which.net/corporate/contents.html

- newspaper articles (e.g. reporting discounts offered as a result of competition, or large price 'shocks' due to cost changes).

6.76 Exceptionally, price information may also be included in past competition cases or regulatory reviews, although details are normally redacted. Information on the general structure of prices is sometimes included.

6.77 We would expect the following information to be extracted from these sources:

- have prices risen sharply with no obvious explanation from costs?
- do the prices of the five largest suppliers move in line?
- are there large differences in prices across regions with no obvious explanation from costs?
- are price structures highly complex, making comparisons across suppliers difficult?
- do prices differ significantly between customer segments with no obvious cost justification? For example, do prices differ between existing and new customers (e.g. are prices structured heavily toward upfront payments or fixed charges), or do firms offer discounts and if so, on what terms and conditions?

Costs

6.78 Detailed cost information is not usually available in the public domain. Questions which could be feasibly answered as part of the market analysis are (1) whether there are significant economies of scale or scope (as discussed earlier in Section 6.55 on entry barriers), and (2) whether costs are published (as this may promote collusion). On the latter, cost information will most usually be published on suppliers' websites.

Profitability

6.79 Rich profitability data is available from the FAME database described in the profitability chapter. Nevertheless, we would expect material in the following sources to complement this information:

- suppliers' press releases announcing year end financial results
- presentations by the CEO or Chairman of each of the five largest suppliers
- news items (e.g. reporting or commenting on the financial results of suppliers, reporting salaries or bonuses of suppliers' senior management or the resignation of senior management, upward or downward 'turns' in the sector, rumours of merger activity).

Productivity

6.80 Robust information on productivity would normally be difficult to come by in a bottom up approach, although a few sources may contain objective, qualitative information on productivity. The better sources are likely to be market research reports and past competition cases.

Consumer Complaints

6.81 The question is whether the sector or individual suppliers attract high volumes of consumer complaints. Useful indicators will be the numbers of complaints made to the UK trading standards departments, sector specific consumer bodies (e.g. the Financial Services Ombudsman, Energywatch, Ofcom, and Postwatch), and trade associations.

6.82 Complaints made to the trading standards departments are recorded by the OFT each quarter, in its *Trends* publication,[321] while complaint data for the sector specific consumer bodies and trade associations will

[321] These can be downloaded from the OFT website at: http://www.oft.gov.uk/News/Statistics/trends.htm

usually be reported in organisation's annual reports (which are commonly available from the organisation's website). A list of sector specific consumer bodies and trade associations is provided, in alphabetical order, on the DTI's website.[322] Otherwise, we suggest a general Internet search to identify these organisations.

6.83 On the basis of our review of complaint data for the top down methodology, broadly, an estimate of more than 7,000 complaints per annum will place the sector within the top 50 percent of most frequently complained sectors.[323] We therefore recommend 7,000 complaints per annum as a threshold for 'high volumes' of complaints.

Switching Costs and Customer Inertia

6.84 The question is whether customers incur relatively high costs when switching from one supplier to another. These may be real or perceived costs.

6.85 Potential sources of information on switching costs are:

- academic material or other papers specifically discussing the presence and implications of switching costs within a sector (including the OFT's report on switching costs)[324]

- press releases or campaigns of the Consumers' Association or other consumer advocates (e.g. warnings of 'problems' in

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322 http://www.dti.gov.uk/consumer_web/info.htm

323 Based on complaints received by the trading standards departments (as reported in *Trends),* the Financial Ombudsman Service, ABTA, Oftel, Energywatch, and Postwatch in the year to March 2003.

324 The main report can be downloaded at http://www.oft.gov.uk/NR/rdonlyres/CFD52220-7862-41A7-8F6F-53F3B4FE78FE/0/oft655.pdf. The report also contains an extensive list of additional references (see both the bibliography and end notes), many of which relate to switching costs in specific markets.

specific after markets, or reported savings by switching suppliers)[325,326]

- consumer surveys and research on brand and product loyalty (as discussed in Section 6.66)
- pricing data (as discussed in Section 6.72).

6.86 We would expect the following questions to inform an assessment of switching costs:

- is the market characterised by a number of strong brands?
- is there evidence to suggest that customers are loyal to particular brands or that there is a degree of inertia?
- is the good or service a secondary product (i.e. is it sold in an after-market)?
- can firms price discriminate between existing and new customers? If so, is there a large difference between the prices payable by these customer groups?

Customer Search Costs

6.87 The question is whether consumers face high search costs prior to making a purchase. The following types of questions will inform whether search costs are likely to be of issue in the sector:

- are advertising bans in place in the sector?

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325 Financial Services Authority, 'Consumers Could Save Hundreds of Pounds by Shopping Around for Best Value, says FSA', Press release 29th October 2002, Available at http://www.fsa.gov.uk/pubs/press/2002/105.html.

326 As noted earlier, a list of consumer advocates is provided on the DTI's website. The Consumers' Association's website is at: http://www.which.net/media/contents.html.

- are the goods or services in question relatively 'complicated' or can consumers easily determine the quality of the good or service? For instance, are goods and services relatively technical (e.g. computers, financial services), or relatively new to the market (and therefore 'untested')?

- how often will the goods or services be purchased? If the good or service is purchased relatively infrequently (say once every five years) or only ever purchased once, then the consumer will have little or no experience on which to base purchasing decisions.

- is the good or service a credence good? That is, does it have certain attributes that consumers cannot learn about, even after having consumed them (e.g. services provided by a doctor, dentist)?

- is there a focal point of competition in the market? Do suppliers tend to compete in relation to one attribute of the good or service in question?[327] If so, has the focal point changed over time, and if not, does the focal point appear to hide important information from consumers? Would it be practically possible and meaningful for suppliers to offer full information?

6.88 These questions should be answerable by using information in general descriptors of the sector,[328] or by using product descriptions on suppliers' websites.

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327 For example, car manufacturers may compete on the basis of fuel efficiency (miles/gallon), or suppliers of photocopiers may focus on cost per page.

328 As noted earlier, general descriptors of the sector will be contained within material sourced from trade associations (e.g. 'information sheets' or 'facts sheets' about the sector), government agencies (e.g. website summaries of the sector, briefing papers or 'fact sheets' about the sector), and market research companies (e.g. Hoovers online, or the sector reports available from the market research companies listed within Table 6.1).

After Markets

6.89 The question is whether consumers are disproportionately influenced by the price of an initial purchase relative to the price of secondary products. Robust consideration of this question is beyond the scope of the market analysis, however indirect evidence is likely to have been identified during research of other indicators. For example, large numbers of complaints about the pricing of secondary products, or very low pricing of the initial good or service relative to the secondary product.

Bidding Markets

6.90 Markets characterised by large and infrequent contracts are less likely to be able to sustain collusive outcomes. In such cases concentration itself is not so much of a concern. A relevant question is therefore whether the market is a normal, posted price market (as opposed to a bidding market).

6.91 If the market is a bidding market, then typically, suppliers and buyers will announce the results of tenders in press releases. Otherwise, general descriptors of the sector would normally detail whether the market is characterised by tendering (i.e. sourced from trade associations, government departments or agencies, or market research companies).

Commission Payments

6.92 A relevant question is whether upstream firms commission salespeople to encourage purchases of specific goods or services. Suppliers' websites will often feature a section describing the relationship they have with 'partners' (i.e. their distributors or agents), which will provide useful information in this regard. Otherwise, general descriptors of the sector should also contain relevant details (i.e. sourced from trade associations, government agencies, or market research companies).

Buyer and Supplier Power

6.93 The question is whether buyers hold sufficient countervailing power to suppliers. Important indictors are the presence of a small number of large buyers, buyers purchasing as a collective, and the proportion of total volumes and revenues attributable to the major buyers in the sector (e.g. the five largest buyers). Many of these were discussed in Section 6.48.

6.94 Potential sources of information are:

- academic papers or discussion papers by government departments or agencies on buyer power (e.g. the OECD has prepared an extensive report on buyer power in multi-product retailing)[329]
- suppliers' websites (e.g. they may list the suppliers' main customers)
- suppliers' press releases (e.g. reporting significant contracts awarded to the supplier)
- buyers' websites (e.g. material may report significant purchasing contracts, or longstanding agreements with particular suppliers).

Geographical Reach

6.95 The key question is whether imports provide an effective source of competitive pressure. Potential sources of information are:

- National Statistics[330]
- Customs and Excise's Intrastat.[331]

Assessment Filter

6.96 To assess whether a market is likely to be competitive or not, we suggest application of the following 20 questions:

1. Does a single supplier in the sector hold a market share of more than 50 percent?
2. Do the five largest suppliers in the sector hold a market share of more than 85 percent?

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329 This is available at: http://www.oecd.org/dataoecd/1/18/2379299.pdf

330 http://www.statistics.gov.uk/default.asp

331 http://www.uktradeinfo.com/index.cfm?task=intrahome

3. Are barriers to entry likely to be significant (e.g. are sunk costs significant; are economies of scale and scope prevalent in the sector; do existing firms hold privileged access to one or more inputs (e.g. finance, a distribution system, labour, property or land, intellectual property rights); are licensing requirements sufficiently stringent to inhibit entry; or do existing firms have a strong brand image?);

4. Would firms incur significant costs if they were to withdraw from a market?

5. Are existing firms restricted from expanding production levels?

6. Have prices risen sharply with no obvious explanation for costs?

7. Do the prices of the five largest suppliers move in line?

8. Do prices vary significantly across regions with no obvious cost justification?

9. Do suppliers appear to price discriminate across customer groups with no obvious cost justification?

10. Are price structures highly complex, making comparisons across suppliers difficult?

11. Is detailed information on production costs available?

12. Is there qualitative evidence to suggest that suppliers are very profitable?

13. Does qualitative information suggest that there is a lack of market growth, productivity or innovation in the sector?

14. Does the sector attract significant volumes of complaints from consumers (e.g. over 7,000 per annum)?

15. Are switching costs likely to hinder customers from switching suppliers?

16. Are customers likely to face high search costs prior to making a purchase (e.g. is there an advertising ban in place; are the products highly technical or complex; are the goods purchased relatively infrequently, are they credence goods or services, is there a focal point of competition which has remained unchanged over the last five years?)

17. Do upstream firms commission salespeople to encourage purchases of specific goods or services?
18. Are buyers sufficiently small and dispersed and therefore unlikely to hold sufficient countervailing power to suppliers?
19. Is the market a posted price market (as opposed to bidding market)?
20. Is there a limited competition from imported goods or services (e.g. accounting for less than 5% of the market)?

6.97 Where this analysis is performed for a number of sectors, a basic prioritisation could be undertaken on the basis of the number of questions to which the answer to the above is 'yes' and also possibly using a measure of market size.

6.98 Where comparison between sectors is not possible, a very simple rule that might be used is that further investigation might be appropriate if the answer to at least six of the above questions is 'yes' and the annual turnover in the market is at least £10 million.

6.99 However, we stress that simple rules like this will inevitably be unreliable. On the one hand, a sufficiently important problem on a single dimension (e.g. an absolute licensing or planning barrier to entry) may justify further investigation even if less than six questions would receive positive response. On the other hand, there are sectors that answer yes to many of the questions but that are not characterised by any competition issues at all..

6.100 Finally, we stress that this list is not intended to be prescriptive. As the analyst delves into the market, even at this superficial level, points of information or issues not considered here may arise that suggest following quite different lines of inquiry, even at this early stage.

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