

**An analysis of the issue of consumer  
detriment and the most appropriate  
methodologies to estimate it**

**Final Report for DG SANCO  
by Europe Economics**

**Executive Summary**

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## EXECUTIVE SUMMARY

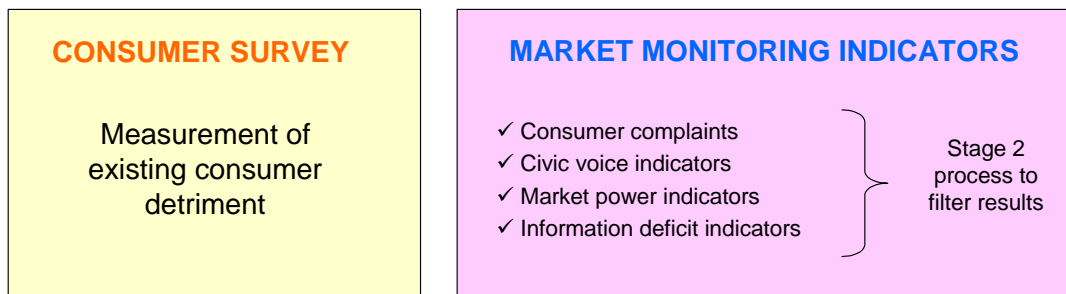
**Note:** in this published version of the executive summary, confidential information has been replaced by the symbol [X].

- 1 In late December 2005 Europe Economics was commissioned by DG SANCO to analyse the issue of consumer detriment and the most appropriate methodologies to estimate it. This document is the published version of our executive summary.
- 2 There are five elements to the project, namely:
  - A multi-disciplinary review of existing research;
  - Definition of the concept, including a thorough analysis of different sources of consumer detriment;
  - Estimation of consumer detriment;
  - Market monitoring indicators;
  - Pilot tests.
- 3 Below we begin by summarising the key outputs which have emerged from the project. We then go through our work in each of the above areas.
- 4 We would like to acknowledge that the psychology and marketing analysis in this report is largely the work of Professor Peter Lunt from Brunel University.

### Key Outputs

- 5 A robust understanding of consumer detriment is at the heart of good policy-making in the field of consumer protection. It is also important for other areas of policy-making which affect consumers.
- 6 There are two main issues facing policy-makers in relation to consumer detriment:
  - Identifying where consumers are suffering detriment, to inform the formulation of policy initiatives;
  - Assessing the impact of policy on consumer detriment, to assist in implementing a policy regime which promotes the interests of consumers in an effective way.
- 7 The diagram below summarises the operational tools which have emerged from our research to assist DG SANCO in each of the above areas. Further information on these tools is given later in this executive summary and in the rest of the report.

## 1 - Identifying priorities for policy action



## 2 - Assessing policy proposals

### HANDBOOK ON ASSESSING IMPACT OF POLICY ON CONSUMER DETRIMENT

- 8 Alongside these operational tools, this report contains a substantial amount of useful information and analysis (e.g. on relevant literature, the definition of consumer detriment, sources of consumer detriment, possible measurement methodologies, and so on).
- 9 We now turn to each of the five elements of the project.

### Multi-disciplinary Literature Review

- 10 Our literature review covered over 60 documents drawn mainly from the fields of economics, behavioural economics, psychology and marketing.
- 11 The economics literature covered a range of issues relevant to consumer welfare. We covered a number of theoretical and empirical papers relating to the loss of welfare from market power, along with literature on the estimated consumer savings which have resulted from the work of competition authorities. We also reviewed papers on the impact of information problems on consumer welfare. Our review included literature on search and switching costs, and on the strategies that firms may use to reduce the extent to which consumers research and compare the prices that are on offer. We reviewed a number of papers relevant to market monitoring, including a paper by NERA on empirical indicators for market investigations (discussed later in this executive summary). Other papers included a survey of consumer detriment carried out by the Office of Fair Trading (OFT) in 1999 and a paper by Hausman on the loss of consumer welfare from regulation-induced delays in the introduction of a new technology.

- 12 The literature we reviewed from the field of behavioural economics covered behavioural biases and their effects on consumers, and the debate on paternalistic policies to address such biases. In particular, we reviewed a number of papers on time variant preferences, as well as papers on limited foresight, consumer loss aversion and consumer myopia. In relation to paternalistic policies, we reviewed two papers which argued in favour of paternalism and one paper which set out the case against such a policy agenda.
- 13 We covered in some detail the work that Professor Lunt did for the OFT on the psychology of consumer detriment.<sup>1</sup> This paper covered a range of pertinent issues, including consumer vulnerability, consumer decision-making, consumer satisfaction and dissatisfaction, consumer complaints, emotions and consumer detriment, and longer term psychological detriment.
- 14 Our review included a range of other papers from the fields of psychology and marketing. We reviewed a number of papers on consumer satisfaction and dissatisfaction, including the INRA-Deloitte study carried out for DG SANCO which developed indicators of consumer satisfaction and the subsequent INRA-Ipsos study which implemented this methodology. We covered two papers on the effect that misleading price comparisons have on consumers, and several related papers on the effect that “bait and switch” marketing has on consumer welfare. Other literature we reviewed included OFT focus group research on consumer detriment, the transcripts of an OFT conference on consumer detriment (organised by Professor Lunt) which took place in 2005, and papers on the psychology of buying and selling in the home, consumer privacy, how people judge the “fairness” of prices, and online marketing directed at children.

## Definition of the Concept

- 15 In this part of the project, we developed definitions of consumer detriment, examined insights from psychology and marketing, and analysed how consumer detriment can arise from market failures, regulatory failures and behavioural biases.
- 16 Our literature review concluded that there was no universally accepted definition of the term “consumer detriment.” However, we suggest that definitions of consumer detriment fall into two broad categories, which we label “personal detriment” and “structural detriment”. These concepts can be defined as follows:
  - **Personal detriment** – negative outcomes for individual consumers, relative to some benchmark such as expectations or reasonable expectations;
  - **Structural detriment** – loss of consumer welfare due to market failure or regulatory failure. Economists typically measure consumer welfare using the concept of

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<sup>1</sup> *The psychology of consumer detriment*, Dr. Peter Lunt, with Laura Miller, Johanna Körting and Joseph Ungema, University College London, published as paper OFT 792, January 2006.

*consumer surplus*, which is the difference between what a consumer is willing to pay for a product and what he actually has to pay.

- 17 Personal detriment focuses on *ex post* outcomes for those consumers who have a negative experience. It may comprise both *financial* and *non-financial detriment*, with the latter including loss of time and *psychological detriment*. We suggest that personal detriment should be assessed against a counterfactual of “reasonable expectations” rather than “expectations”, partly because the latter might lead to under-estimation of the detriment suffered by vulnerable groups who may have low expectations.
- 18 By contrast, structural detriment considers consumers in aggregate and is based on the *ex ante* reduction of consumer surplus rather than on *ex post* outcomes. We argue that if consumers are fully informed and rational, then structural detriment fully captures the risk of *ex post* psychological detriment, because this risk will be taken into account in consumers’ willingness to pay (and will thus be captured in consumer surplus). In our view, there is no perfect candidate to use as the counterfactual for structural detriment, although possibilities include perfect competition or “well-functioning markets” (which is more realistic but less easy to define).
- 19 Our research in the fields of psychology and marketing provided useful insights. We have identified a number of consumer groups which may be vulnerable, but also note that recent research emphasises the idea that *any* consumer can be vulnerable in certain circumstances. Our analysis of individual psychology finds that, while choice is often beneficial for consumers, some research suggests that too much choice may be detrimental. Within the framework of social psychology, marketing can be seen as an attempt to exercise social influence and to change attitudes. Marketing can exploit social rules of politeness (e.g. people may feel rude if they put the phone down on telemarketers), and advertising can sometimes be a cause of offence when it challenges people’s values. In consumer psychology, the idea of consumer satisfaction has been widely studied, and there are a range of individual differences (e.g. impulsiveness, consumer literacy) which affect how consumers respond to marketing.
- 20 A source of consumer detriment widely discussed in economics is market failure. We suggest that the most important sources of market failure to consider in the context of consumer detriment are market power and information problems.
- 21 Market power can lead to consumer detriment by allowing firms to increase prices above the competitive level, both deterring marginal consumers from purchasing the product, and leading to a transfer of welfare from remaining consumers to producers. We have analysed various factors that may give rise to market power (e.g. barriers to entry, high concentration), and have reviewed theoretical models of market power and empirical literature on estimating the resulting loss of consumer welfare.
- 22 Imperfect information can lead to consumer detriment in a number of ways. For instance, imperfect information on prices (e.g. due to search costs) may allow firms to raise their prices above the competitive level. Imperfect information on quality, particularly in the

case of experience goods<sup>2</sup> and credence goods<sup>3</sup>, can prevent consumers making optimal choices and harm the functioning of markets. Again, we have reviewed theoretical and empirical literature on estimating the loss of consumer welfare from such information problems.

- 23 Consumer detriment may also arise from reductions in the rate of innovation through time, whether due to market failure (innovation spillovers) or regulatory failure (e.g. mandatory product specifications which restrict the scope for innovation).
- 24 Another potential source of consumer detriment is sub-optimal product variety. The economic literature in this area suggests that free markets can provide either too much or too little product variety, depending on conditions.
- 25 Alongside market failures, consumer detriment can also arise from regulatory failure. Regulations which could lead (in some circumstances) to consumer detriment include:
- Product bans and restrictions;
  - Intervention in markets to set prices or quantities;
  - Regulatory barriers to entry (e.g. licensing regimes);
  - Restrictions on trade;
  - Regulations which lead to cost increases for firms (“red tape”);
  - Restrictions on production activity (e.g. environmental regulations);
  - Acts of omission (i.e. failure to take action to provide a framework for well-functioning markets or to tackle market failure).
- 26 Behavioural economics provides interesting insights into the possibility of consumer detriment arising from biases in consumer behaviour. Models in behavioural economics can be divided into two categories:
- *Preference-based theories*, in which consumers have preferences different from those assumed in mainstream economics; and
  - *Cognitive-based theories*, in which consumers make cognitive errors in taking their decisions (e.g. they misunderstand the laws of probability).
- 27 Our view is that consumer detriment arises mainly in those cases where consumers make cognitive errors: here it can be argued that consumers fail to maximise their well-being given their underlying preferences. On the other hand, policy-makers would need to take a paternalistic view of preferences in order to argue that anomalous preferences give rise to consumer detriment.

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<sup>2</sup> Goods whose quality can only be assessed by consumers after consumption has taken place (e.g. home maintenance).

<sup>3</sup> Goods whose quality cannot even be assessed after consumption, unless the consumer purchases a second expert opinion (e.g. legal or medical services).

## Estimating Consumer Detriment

- 28 Our terms of reference require us to develop a methodology or methodologies which can be used for the estimation of consumer detriment.
- 29 We suggest that estimates of personal detriment broken down by product, sector or type of transaction would be useful (alongside any market monitoring indicators) in *identifying problem areas where policy action might be appropriate*. By contrast, we consider that estimates of structural detriment are less useful when scanning for problem areas, because estimating structural detriment is inherently a bottom-up, case-specific process.
- 30 We suggest that both personal detriment and structural detriment are potentially useful concepts when *assessing the impact of policy proposals*. Protecting consumers against serious personal detriment may give them greater confidence to participate in markets, whereas the concept of structural detriment is useful in assessing the impact of policy on consumers in aggregate.
- 31 Based on an assessment of a wide range of possible methodologies, we conclude that:
- The best method of measuring the existing level of personal detriment is a survey of consumers. In particular, a survey approach would allow the collection of data on a representative sample of consumer problems. However, one of the drawbacks of a survey approach is the cost.
  - The best method of assessing the impact of policy on consumer detriment is inherently case specific. In light of this, we have written a handbook for desk officers setting out the principles, techniques and processes which can be used to estimate the impact of policy on consumers in different cases.
- 32 We reviewed a number of previous surveys of consumer problems to identify what lessons we could learn in designing our own survey methodology. A particularly useful precedent is the OFT survey on consumer detriment carried out in 1999, and we are grateful to the OFT for providing us with a copy of the survey questionnaire and additional information about the results. We also reviewed the INRA-Ipsos survey on consumer satisfaction carried out for DG SANCO. We concluded that, while the INRA-Ipsos survey was informative, it would not be possible to combine it with our own survey without compromising the objective of either methodology.
- 33 We have had some discussion and correspondence with Ipsos-MORI regarding how best to conduct a survey of consumer detriment. The advice we received included that we should use an *ad hoc* survey (rather than an Omnibus survey) and that the survey should be conducted face-to-face (rather than over the phone or internet).
- 34 A problem identified by both the OFT and the US Federal Trade Commission (FTC) in previous survey work concerns the fact that there tends to be a small sub-set of consumers who have experienced very large financial losses. This makes it difficult to produce reliable estimates of financial detriment or to break down financial detriment by

sector, because only a few such consumers are likely to be picked up in any random survey sample. Possible ways to address this problem include asking some respondents about their worst problem (rather than a random problem or their last problem), and/or using filter questions in an Omnibus survey to build up a booster sample of cases of large detriment.

- 35 We recommend surveying a rotating sample of Member States each year. This would allow the survey to be fine-tuned each year in light of experience, and would allow the Commission to gather regular data on consumer problems in a cost-effective way. Based on data supplied by Ipsos-MORI, we estimate that a four-year survey cycle would cost on average [€] per annum, and that the cost of a five-year cycle would average [€] per annum.<sup>4</sup>
- 36 The proposed questionnaire (revised in the light of findings from pilot testing) was provided as a separate document to the Commission.

## Market Monitoring Indicators

- 37 Our terms of reference require us to examine “whether it would be possible to establish indicators providing early warning against the occurrence of sub-optimal outcomes for consumers.”
- 38 NERA conducted a similar exercise for the OFT (published in 2004),<sup>5</sup> in which they attempted to develop a tool which could be used to screen top-down data to identify markets in which there was consumer detriment. NERA examined 32 indicators in total, which they grouped into 9 categories: barriers to entry, productivity, concentration, profitability, prices, consumer complaints, innovation, switching costs and other. For a sub-set of these indicators, NERA tested two combination methodologies: taking the worst ranked sectors on each indicators, and calculating a weighted average (or Borda) score across indicators. However, some of the results appeared to be spurious. NERA concluded that there were severe limitations with a top-down methodology, and that bottom-up search techniques were needed either as a complement or substitute.
- 39 We have examined a wide range of possible indicators and some alternative combination methodologies. Our suggested approach uses the following two-stage procedure:

**Stage 1** – the use of top-down data (mostly quantitative) to scan the economy for sectors in which there may be a problem.<sup>6</sup>

**Stage 2** – filtering the results of stage 1 using bottom-up indicators which require desk officers to make qualitative judgments.

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<sup>4</sup> The costs vary between years depending on which countries are included in that year's sample.  
<sup>5</sup> “Empirical indicators for market investigations”, Prepared for the OFT by NERA, September 2004.  
<sup>6</sup> The “civic voice” indicators mentioned below could generate both qualitative and quantitative data.

- 40 We have identified the following indicators for use at stage 1:
- **Consumer complaints;**
  - **“Civic voice” indicators** which track expressions of consumer concerns by civil society bodies and identify emerging consumer problems on web logs (blogs);
  - A set of **market power indicators** which are aimed at identifying sectors which have high concentration *AND* possible barriers to entry *AND* high profitability;<sup>7</sup>
  - **“Information deficit” indicators** constructed using responses to the consumer survey.
- 41 We have carried out analysis of the usefulness of consumer complaint data, drawing on literature relating to the determinants of consumer complaint behaviour. Complaints clearly provide an indicator of where consumers feel that they have suffered significant (personal) detriment. However, complaint data suffer from a number of biases (e.g. consumers do not always complain when they suffer detriment, and the tendency to complain varies between different groups of consumers). In light of this, complaint data need to be interpreted cautiously.
- 42 Apart from some limited complaint data available from ECC-Net (which appears to relate particularly to cross-border problems), there appears to be little EU-wide complaint data currently available. Hence, monitoring of consumer complaints would probably require data to be aggregated from national sources. This may in turn require a Commission initiative in the form of a Communication or an informal data-sharing arrangement.
- 43 The “civic voice” indicators are derived from our psychology and marketing analysis. The proposed methodology involves periodically reviewing the campaigns conducted by consumer representation bodies and classifying them using relevant variables from the consumer survey (e.g. for sector and type of problem). To complement this, we suggest reviewing emerging consumer issues in relevant web logs (blogs) to provide an early indicator of potential new sources of detriment.
- 44 The market power indicators are subject to a number of inherent weaknesses and we recommend that results be treated with caution. A major drawback is that, within a top-down market monitoring exercise, it is impossible (in our view) to ensure that each market is correctly defined. In addition to the problem of market definition, there are other theoretical weaknesses to each of the indicators (e.g. high concentration does not necessarily imply market power). Finally, there are problems associated with the data which is available to calculate these indicators.

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<sup>7</sup> The idea is that where all three of these characteristics are present in combination, there is reason to suspect that consumers may be suffering detriment due to market power. However, this set of indicators is particularly affected by the market definition problem, and hence any results need to be treated with caution.

- 45 Finally, the “information deficit” indicators would be constructed from survey questions which ask consumers to suggest sectors in which they feel they lack the information they need to make good decisions about whether to purchase a product, or which supplier or brand to choose.
- 46 The stage 2 filtering process would involve removing results which were obviously spurious, checking the validity of the reasons why each sector was selected at stage 1, and assessing the remaining sectors against a further set of qualitative, bottom-up indicators. Some draft guidance for desk officers on how to carry out stage 2 is contained in appendix 4 of the full report.

## **Pilot Tests**

- 47 There were three elements to the pilot testing we carried out, corresponding to the key outputs discussed earlier in this executive summary:
- A pilot test of the survey approach, which involved cognitive testing of a draft survey questionnaire in the UK and Poland;
  - A test of the handbook, by applying it to an illustrative policy;
  - Testing of the market monitoring indicators.
- 48 Cognitive testing is a qualitative approach which involves in-depth discussion of the questionnaire content with the respondent as the interview unfolds. Twelve interviews were conducted in both the UK and Poland, with respondents selected to ensure coverage of a mix of demographic groups. This work was carried out by Ipsos-MORI and is written up in the Ipsos-MORI documents provided alongside this report.
- 49 An important conclusion drawn by Ipsos-MORI is that the survey approach represents “a perfectly valid way to measure consumer detriment.” The cognitive testing also identified a range of enhancements to the draft questionnaire, thus improving the results that would be obtained from a full-scale quantitative survey.
- 50 We have carried out a small-scale test of the handbook, by applying it to an illustrative policy.
- 51 We were able to carry out far more extensive testing of the market monitoring indicators than we originally envisaged, particularly in relation to the market power indicators.
- 52 We tested the consumer complaints indicator by analysing UK data from the Consumer Direct complaints database. It was clear from this test that consumer complaints can provide valuable information for policy-makers (e.g. on the sectors where consumers are experiencing detriment, the nature of that detriment, and how detriment breaks down between different methods of purchase).

- 53 The “civic voice” indicators were tested by reviewing the campaigns run by the Consumers Association in its regular publication *Which?*. Again, this appeared to be a fruitful source of information on consumer concerns, helping to fill the information gap arising from the fact that individual consumers do not always complain about their problems.
- 54 We used data from the Amadeus database to test the market power indicators. We began by calculating the indicators, both on an EU-wide basis and separately for each Member State, for most sectors of the economy. We then used top-down data on past EC antitrust cases to calibrate the thresholds used to assess whether sectors were problematic. The optimal set of thresholds identified by this process appeared intuitively reasonable, and gave a correlation coefficient of around 0.3 between the results from our indicators and the number of past EC antitrust cases in each sector. A number of the sectors selected by our indicators appeared quite plausible candidates for potential problem markets, although others appeared to be spurious. Based on the results from this extensive pilot testing, we developed revised proposals for market power indicators, which included dropping two of the less useful (and more data-intensive) of the indicators and identifying a possible set of threshold values for the others.
- 55 Finally, the “information deficit” indicators were tested as part of the cognitive testing undertaken by Ipsos-MORI. A number of problems were identified with the relevant survey questions, and in addition it was unclear whether responses to the questions were focusing on the right sort of sectors. We have made some initial changes to the drafting of the survey questions, but it remains unclear how workable these “information deficit” indicators are in practice.