



JRC SCIENCE AND POLICY REPORT

Consumer conditions in the EU: Revised framework and empirical investigation

*Final Report for the Consumers
Directorate of DG Justice and
Consumers*

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June 2015

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List of Acronyms

ACCC	Australian Competition and Consumer Commission
ADR	Alternative Dispute Resolution
CCI	Consumer Conditions Index
CEPEJ	Council of Europe Commission for the Evaluation of the Efficiency of Justice
CLAB	Clauses Abusives
CLAB database	European Database on Unfair Terms in Consumer Contracts
CPC	Consumer Protection Cooperation
CSN	Consumer Sentinel Network, US
DEA	Data Envelopment Analysis
DG JUST	Directorate General for Justice and Consumers
DG SANCO	Directorate General for Health and Consumers
EB358	Eurobarometer Survey 358
EB359	Eurobarometer Survey 359
EC	European Commission
ECC	European Consumer Centre
ECC-Net	The EU network of European Consumer Centres
EU ICT	EU Surveys on ICT usage and e-commerce
EU SILC	EU Survey of Income and Living Conditions
FIN-NET	Financial Dispute Resolution Network
GCI	Global Competitiveness Index
GDP	Gross Domestic Product
JRC	Joint Research Centre
NGO	Non-Governmental Organisation
ODR	Online Dispute Resolution
PCA	Principal Component Analysis
PPS	Purchasing Power Standards
SMEs	Small and Medium Enterprises
UCPD	Directive on Unfair Commercial Practices
UCPs	Unfair Commercial Practices
UK OFT	Office of Fair Trading, UK
US FTC	Federal Trade Commission, US
VAT	Value Added Tax

Executive summary

The European consumer policy aims at protecting and empowering consumers, and at creating a level playing field for businesses in the single market. The European Consumer Agenda (COM (2012) 225 final) defines four key 2020 objectives for consumer policy at the EU level: improved consumer safety; enhanced knowledge and awareness of consumer rights; effective enforcement of consumer laws and efficient ways to solve disputes; and the adaptation of consumer rights and policies to changes in society and in the economy. The pursuit of these objectives entails a dynamic regulatory process, as illustrated by the recent legislative initiatives of the European Commission (EC) in the field.

As the EU cooperation and the regulatory efforts for consumer protection evolve, so do the tools used for monitoring these policies. The two main measuring tools employed by the European Commission for the monitoring of consumer outcomes across the Single Market are the EC Consumer Conditions Scoreboard and the EC Consumer Markets Scoreboard. Published regularly by the Consumers Directorate of DG Justice and Consumers¹, the two scoreboards are designed to reflect the latest developments in consumer conditions and markets across Member States based on data from surveys and other sources. Recently, the Consumers Directorate of DG Justice and Consumers commissioned the Joint Research Centre (JRC) to provide support for the conceptual and statistical revisions of the two scoreboards with the objective to further enhance their methodological robustness and to update them in line with the latest market and regulatory developments. This report includes the work performed by the JRC in the context of this cooperation for the conceptual and statistical revision of the first scoreboard, the EC Consumer Conditions Scoreboard.

The report contains two parts. The first part provides an updated framework for measuring consumer conditions in the EU, including a revision of the Consumer Conditions Scoreboard and of the EC consumers' and retailers' surveys related to it. Data from these revised EC surveys are used for the empirical investigation – including the analysis of the sample structure, the

¹ The Directorate was part of DG SANCO in September 2013 when this cooperation started, and it became part of DG JUST in November 2014.

exploration of survey indicators, and regression analysis – and are presented in the second part of the present report.

Part I – An updated framework for measuring consumer conditions in the EU

The first part contains five chapters, each dedicated to a distinct approach of the concepts and measurement of consumer conditions. With the view that consumer protection is a multifaceted topic, we screen the economic theory for factors that help define consumer experiences in the marketplace, the policy documents discussing the legislative framework of consumer protection in the EU, and reports of other surveys of consumers and retailers carried out at national level. Based on these reviews, the report introduces an updated framework that enhances the extent to which the EC scoreboard reflects the latest developments in consumer conditions across Europe. It also includes a statistical audit of the Consumer Conditions Index defined currently in the EC Consumer Conditions Scoreboard (the 9th edition) as a summarising measure of consumer conditions in the EU countries.

We begin by looking at what economic theory suggests with respect to factors that shape consumer conditions (chapter 1.1). We acknowledge that consumer conditions are about imperfect information that revolve on the interplay between the supply of accurate information about goods and services on the one hand and consumers' ability to acquire, comprehend, and interpret that information on the other. Likewise, measures to improve consumer conditions are concerned with both the supply and reception of information about goods and services. In addition, these measures can be provided not only by governments but also by firms and (informal) consumer networks.

Nevertheless, if theory tells us what can happen, it is the actual implementation of policies that drives the conditions in the marketplace. In chapter 1.2, we review the legislative framework of consumer policies at the EU level and their implementation in the Member States. The aim is to identify the key concepts in the field, concepts that can be viewed as common denominators of consumer conditions in the EU Single Market. With respect to policies, the analysis ranges from early legislative initiatives at the EU level, such as the Directive for Misleading Advertising enacted in 1984, to the most recent legislative provisions of the Consumer Rights Directive, in

full force by mid-2014. We find that the current approach of consumer policy in Europe emphasizes the need for full harmonization of legislative provisions for consumer rights across the Member States. For example, concepts such as unfair commercial practices, adequate information on terms of trade, legal guarantees for defective products, cooling off periods and the right of withdrawal are now legislated in a coherent manner throughout the internal market.

Chapter 1.2 addresses additional concepts such as consumer detriment and mechanisms of conflict resolution. The mechanisms in place for the resolution of consumer disputes include in-house customer services offered by businesses, traditional court hearings, schemes for alternative dispute resolution, the European Consumer Centres, and the European Small Claims Procedure. All the concepts identified in this chapter are used for the revision of the conceptual framework of the scoreboard later in the report.

The empirical analysis conducted on the latest edition (9th) of the EC Consumer Conditions Scoreboard issued in 2013 consists of a statistical audit of the structure of the Consumer Conditions Index (CCI) included in the scoreboard (chapter 1.3). The CCI index is a summary measure of consumer conditions in national markets, and it includes twelve quantitative indicators grouped in five dimensions (pillars): feeling protected, illicit commercial practices, consumer complaints, redress, and product safety. The statistical audit of the index entails data checks, correlation analyses, and uncertainty and sensitivity analyses about the impact of modelling assumptions on country rankings. The data checks performed in the first step indicate that there are no statistical irregularities in terms of missing data or outliers in the indicators. Out of the twelve indicators, only two items display slight departures from normality but these deviations do not affect significantly the overall index. The statistical coherence of the index is analysed through correlations and principal components analysis. The results indicate that, while all indicators contribute in a balanced way to their respective pillar, the contributions of the pillars themselves to the overall index are uneven: the index is driven primarily by only two of the five dimensions.

Further in the statistical audit, we perform uncertainty and sensitivity analyses in order to investigate the influence of modelling assumptions on the final country rankings given by the

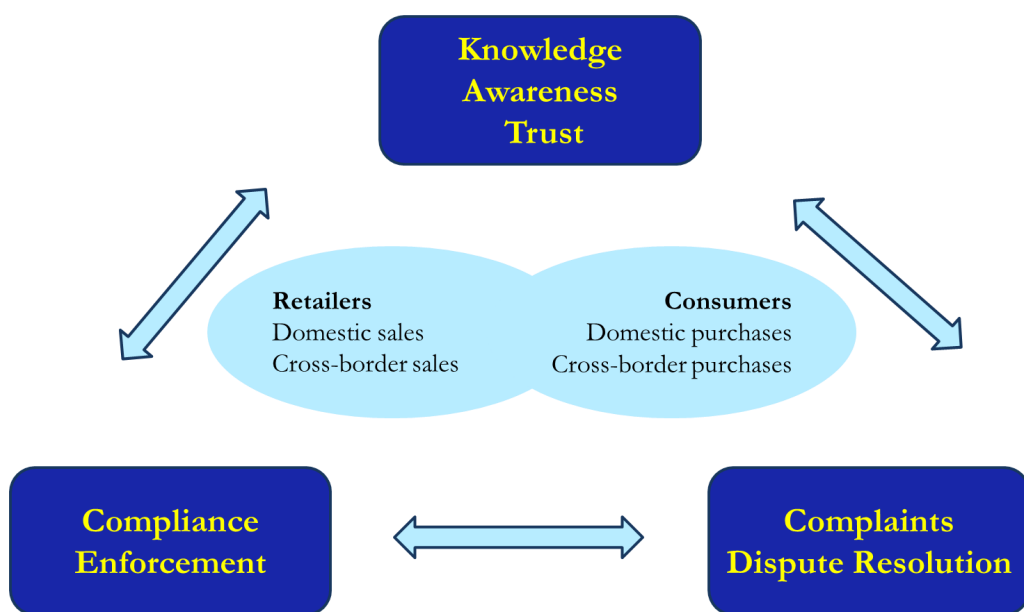
CCI scores. In this respect, country ranks are relatively stable to the modelling choices (including aggregation formula, normalization, and weighting scheme), with shifts in ranks of no more than three positions for the majority of countries. Eventually, the sensitivity analysis – used to disentangle the relative influence of modelling choices to the index – highlights that the choice related to the aggregation method has the highest influence on country rankings, although the impact remains moderate. Overall the index proves to be fairly statistically robust.

Chapter 1.4 provides an overview of country-level surveys on similar issues for consumers from countries such as Australia, New Zealand, Sweden, the United Kingdom, and the United States. For retailers, we could identify only one relevant survey from Australia. The objective of this review is to identify best practices for the measurement of aspects of consumer conditions worldwide. Apart from the relevance of the topics, the selection of alternative surveys was largely driven by the availability of documentation in the public domain. When compared with the current EC surveys of consumers and retailers on which the EC scoreboard is based, the surveys we analyse differ in two main respects. First, they are all country level surveys, and therefore differ in scope relative to the cross-country nature of the EC surveys. Second, the objective of some of these surveys is to enable an in-depth analysis of specific consumer issues. For example, one UK survey focuses on unfair commercial practices, while the second one addresses the detriment incurred by consumers with shopping problems. The US survey, on the other hand, concentrates on consumer fraud. Nevertheless, despite these differences in scope and objective, we find that many issues analysed at country level are relevant also at the EU level. Such issues include consumer vulnerability, basic shopping skills, the prevalence of unfair commercial practices, shopping problems, and the perceptions of business with respect to the efficiency of regulations. Examples of questions from these country level surveys are used frequently in the following chapter where we discuss the updates for the conceptual framework of the EU scoreboard.

The updated framework for the measurement of consumer conditions in the EU is included in chapter 1.5. A schematic representation of the framework is illustrated below. The main strengths of the framework are the following. First, the framework relies on a set of criteria that imply measuring similar issues along two main axes: types of participants in a transaction

(consumers and retailers), and types of transactions in the EU context (domestic and cross-border). Second, the framework is structured in three dimensions: knowledge, awareness, and trust; compliance and enforcement; and complaints and resolution of problems. This entails a measurement framework that is both conceptually coherent and statistically consistent. Third, each of the dimensions in the framework is designed along two components: a main (core) component with indicators that are to be measured repeatedly for each edition of the scoreboard, and a flexible component designed to include different indicators from one scoreboard edition to another. The core indicators serve to monitor trends in consumer conditions across EU countries over time, while the indicators included in the flexible part of the scoreboard are used to provide a snapshot of issues of current policy interest.

Framework for the measurement of consumer conditions in the EU



After introducing the updated conceptual framework, chapter 1.5 continues with the presentation and discussion of the revised and new items included in the new questionnaires for the EC surveys of consumers and retailers that constitute the main data sources for the next edition of the EC Consumer Conditions Scoreboard. For each of these items, if relevant, we also discuss the possibilities to develop quantitative measures of consumer conditions. The revised questionnaires are the result of consultations between the JRC, Consumers Directorate of DG Justice and Consumers, experts from Member States, and other EC services. The chapter ends

with a brief discussion of types of analyses that can be developed based on the updated framework.

The advantage of the updated framework relies in providing a well-defined and conceptually sound structure of distinct dimensions along which consumer conditions can be measured, differentiating between 1) knowledge, awareness and trust, 2) compliance and enforcement and 3) complaints and dispute resolutions. In line with the process towards a Single Market in the EU and the increasing expansion of telecommunication means, the research design of the framework is structured along two types of transaction (domestic and cross-border). As such, the revised framework could lead to several research analyses that may help policy choices toward the improvement of consumer conditions. Among the most relevant avenues of analysis it is worthwhile mentioning: 1) the analysis of the integration of the EU Single Market based on the data on cross-border transactions for consumers and retailers, 2) the comparison of the relative position of Member States with respect to each dimension of domestic transactions for consumers and retailers, and 3) the analysis of the perceptions and experiences of vulnerable consumers in each country.

Part II – EC surveys on consumers and retailers: an empirical investigation

This part has the objective of providing suggestions for the refinement and the further development of the Consumer Conditions Scoreboard. To this end, 1) we review the empirical tools that can be used to compare consumer conditions across socio-demographic groups, 2) we analyse possible country indicators that can be extracted from the EC consumer and retailer surveys, and 3) we analyse the sample structures of the abovementioned EC surveys that are used for developing the Consumers Conditions Scoreboard. The empirical analyses presented in part II are conducted on macro-data from the revised EC surveys on consumers and retailers discussed in part I. The field work of these surveys was commissioned by the Consumers Directorate of DG Justice and Consumers and performed by TNS Political & Social during the first half of 2014.

Chapter 2.1 provides a survey of the literature about consumer conditions. The survey focuses first on studies that explore the relationship between socio-demographic characteristics,

consumer attitudes and personal traits and their likelihood of being victims of consumer fraud. Afterwards, the overview of literature documents the existing research on how consumer characteristics associate with the propensity to complain. Eventually, we propose a set of empirical investigations performed on data from the EC consumer and retailer surveys in accordance with the suggestions by the literature. Conditional on the nature of the dependent variable, we estimate different types of regression models:

- Count models to shape the occurrences of consumers' complaints, victimisation experiences, and the knowledge of their rights;
- Logistic models for dependent indicators built as dummy variables to account for: 1) consumers' trust in public authorities, in retailers and providers of services, and in NGOs; 2) the practice of purchasing online; 3) consumers' confidence in online buying, and in cross-border-selling.

We conduct regression analysis for different samples to allow for comparisons of different shopping environments (e.g. inside and outside country purchases). Explanatory variables of the models are in line with the literature and account for socio-demographic characteristics (e.g., age, gender, income status, employment level), and for consumer attitudes (e.g., consumers' perception on trust and ease of dispute settlement).

The regression models on the consumer survey reveal interesting associations useful for future framing of policy measures related to consumer conditions. First, consumers with financial difficulties associates with a lower degree of knowledge about their rights, a higher propensity to fraud, but at the same time are less associated with consumer complaints. Second, consumers undertaking online purchases are characterised by higher numerical skills, less financial difficulties and better knowledge of their rights, but are more prone to fraud and keen to complain. Third, consumers with lower trust in public authorities, and NGOs associate with higher rates of victimisation and lower confidence in the ease of dispute resolution. Policy measures should be tailored to different groups of consumers, and should guide them along their specific needs.

A similar regression exercise is proposed for retailers' data. Employing count models, we investigate the number of channels from which a retailer received consumer complaints during the last 12 months, and their knowledge of legislation. We investigate through logistic models the situation of online selling and of the use of ADR resolution schemes. All these retailers' aspects are related to the characteristics of firms in order to get insights about which types of retailers are more associated with complaint experiences and with better/worst knowledge of legislation. Explanatory variables include firms' size and turnover, their internationalisation, distance selling, the type of market they are active in (i.e. products vs. services), and knowledge of regulation.

Results highlight that larger companies in terms of size and turnover, and engaged in distance selling receive complaints through more differentiated channels. Firms that are active in food products are less knowledgeable about legislation, are less likely to sell online and use less ADRs. The opposite evidence is found for service companies. Eventually, firms with favourable perceptions of domestic regulations are more knowledgeable about the legislation and more engaged in online selling, and use of ADRs.

In chapter 2.2 we analyse country indicators that can be constructed based on the EC surveys on consumers. First, we propose an alternative indicator on problems and complaints with respect to the indicators previously included in the Consumer Condition Scoreboard. The main advantage of this indicator is that it incorporates information about the whole survey sample, while previous measures were criticised for their biases due to small sample coverage. In addition we explore the possibility to extract indicators on consumers' knowledge of their rights, consumers' trust and prevalence of UCPs. We propose to use indicators of average consumers' knowledge and trust, while we do not recommend using combinations of questions to construct composites on the prevalence of UCPs.

In chapter 2.3 we compare the sample structure of the EC consumer survey with population data reported by Eurostat in order to explore the representativity of sample data with respect to age groups and gender at country level. Overall, the analysis indicates that the country samples of the

consumers in this survey are relatively balanced across EU 28 Member States with respect to age and gender.

In chapter 2.4 we focus on the sample structure of the EC survey of retailers, and consider the following issues: 1) the inclusion of micro-enterprises in future waves of the EC surveys, and 2) the representativity of the sample structure of the EC retailers' survey for the population of firms in economic sectors of high relevance for the analysis of consumer conditions. For the first issue, we explore the contribution of micro-enterprises in terms of enterprise numbers, employment and gross value added to the selected economic sectors based on data from the database on European SMEs developed by DG Enterprises and Industry. The analysis indicates that micro-enterprises bring in significant contributions to the EU Single Market and, as a result, we recommend including these types of firms in the sample of upcoming EC surveys or retailers. In the second issue, we analyse the sample structure of the EC retailer survey with respect to the distribution of retailers across selected economic sectors, and to their size in terms of number of employees. We learn that larger discrepancies between the sample structure and the respective population structure of firms are likely to be present when analysing the percentages of firms active in each of the selected sectors. In contrast, the analysis with respect to the type of firms (small, medium, large) indicates relatively more balance samples across countries.

Eventually, chapter 2.5 we present the development and the statistical audit of the 10th Consumer Conditions Index. This index is extensively revised with respect to the previous version presented in chapter 1.3., in order to reflect the updated framework of consumer conditions in the European Union. Hence, the index is constructed along the three main pillars of the framework: 1) knowledge, awareness and trust, 2) compliance and enforcement, and 3) complaints and resolution of problems. All indicators are selected as to provide a comprehensive overview of consumer conditions in each country for domestic transactions. In addition, each pillar preserves as much as possible the symmetry between the consumers and retailers perspective. The data to construct the indicators stem from the EC consumer and retailer surveys conducted in 2014 (see appendix to chapter 1.5). The statistical coherence of the index investigated with sensitivity and uncertainty analyses reveals that the index remains relatively robust to alternative choices for the aggregation method, normalization formula, or weights.

Introduction

The European Consumer Agenda (EC COM 2012 225 final) sets out the EU strategy in the field of consumer policy which aims to maximise consumer participation and trust in the market. Built around four key objectives, the Agenda aims to increase confidence by: improved consumer safety; enhanced knowledge and awareness of consumer rights; effective enforcement of consumer laws and efficient ways to solve disputes; and the adaptation of consumer rights and policies to changes in society and in the economy, especially in key sectors such as financial services, food, energy, travel and transport, and sustainable products.

As the EU cooperation and the regulatory efforts for consumer protection evolve, so do the tools used for monitoring these policies. The two main measuring tools employed by the European Commission for the monitoring of consumer outcomes across the Single Market are the EC Consumer Conditions Scoreboard and the EC Consumer Markets Scoreboard. Developed regularly by the Consumers Directorate of DG Justice and Consumers, the two scoreboards are designed to reflect the latest developments in consumer conditions and markets across Member States based on quantitative indicators. Recently, the Consumers Directorate of DG Justice and Consumers commissioned the JRC to provide support for the conceptual and statistical revisions of the two scoreboards with the objective to further enhance their methodological robustness and update them in line with the latest market and regulatory developments.

The first part of this report includes the work performed for the revision of the first monitoring tool, the EC Consumer Conditions Scoreboard, in the context of the cooperation between the Consumers Directorate of DG Justice and Consumers and the JRC. Based on the view that the updating of a conceptual framework for the measurement of consumer conditions requires a multifaceted approach, we screened both the economic theory and the policy documents relevant in the field in order to identify the scope for further improvements of the scoreboard. The analysis combines perspectives from the economic theory of consumer decision making to the EU legislative framework for consumer protection, as well as empirical explorations of the statistical properties of the actual measures included in the EC Scoreboard and of other closely related consumer surveys developed internationally.

The structure of the report is the following. Chapter 1.1 provides a discussion of economic theory on consumer conditions. The main argument holds that consumer conditions are shaped at the interplay of the supply and reception of information about goods and services. It follows that the measures to improve consumer conditions are concerned with both aspects. These measures can be provided by firms, (informal) consumer networks, and governments in the form of regulatory policies. Chapter 1.2 identifies the key concepts of consumer conditions by looking at the main EC regulatory measures for consumer protection across the single market, and their implementation in the Member States. Chapter 2.2 includes the statistical audit of the 9th edition of the EC Consumer Conditions Scoreboard, and chapter 1.4 provides an overview of other tools developed at country level for the evaluation of consumer environments in countries such as Australia, New Zealand, Sweden, the United Kingdom, and the United States. The first part of the report ends with chapter 1.5 on the updated framework for measuring consumer conditions in the EU.² This last chapter includes also a discussion of the revised questionnaires for the EC surveys of consumers and retailers, which are the result of consultations between the JRC, the Consumers Directorate of DG Justice and Consumers, experts from the Member States, and other EC services. These survey questionnaires will be implemented on the 10th edition of the EC Consumer Conditions Scoreboard.

The second part of the report aims to provide suggestions to refine, and further develop the Consumer Conditions Scoreboard. Data from the aforementioned revised EC surveys are used for the empirical investigation – including the analysis of the sample structure, the exploration of survey indicators, and regression analysis. It includes a review of the empirical tools that can be used to compare consumer conditions across socio-demographic groups. Chapter 2.1 contains a survey of literature about consumer conditions. Chapter 2.2 explores possible country indicators that can be extracted from the EC consumer and retailer surveys. Chapter 2.3 and chapter 2.4 analyse the sample structures of respectively the EC consumer and retailer surveys to investigate to what extent the weighted survey data is representative of the population. Eventually, chapter

² The authors are grateful for the support and advice provided by the colleagues in DG SANCO, Unit B1 Consumer Markets.

2.5 presents the 10th edition of the consumer conditions index that has been constructed in line with the new updated framework for measuring consumer conditions in the European Union.

1 An updated framework for measuring consumer conditions in the EU

1.1 Economic theory on consumer conditions³

Sjoerd Hardeman

This chapter includes a brief discussion of imperfect information as a central issue defining consumer conditions. It is argued that consumer conditions revolve at the interplay between on the one hand the supply of accurate information about goods and services and on the other consumers' ability to acquire, comprehend, and interpret information about goods and services. Following up on this argument, some market and regulatory solutions designed to improve consumer conditions are discussed.

1.1.1 Introduction

In every market economy in which people do not themselves produce most of the goods that they use, consumption makes up a large part of the economy as a whole. Taking GDP as a valid indicator of the size of an economy and noting that consumer expenditures currently amount to 56% of EU GDP, it is clear that consumption forms a most important part of the European market economy.

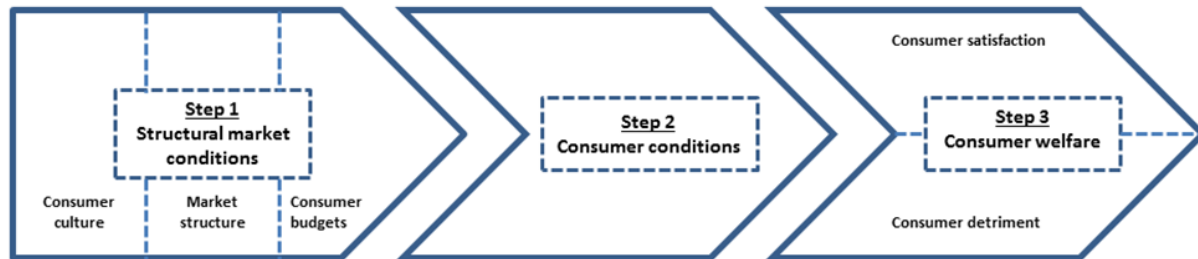
As a first approximation, consumer conditions are considered to involve those aspects that facilitate or hamper the transformation of consumer choice into consumer welfare. Pictured in a linear sequence, consumer conditions lay lie between consumer structural market conditions (needs, budgets, and the variety of goods available on the market), on one hand, and consumer welfare (or the extent to which consumers are satisfied with the outcomes of their choice behaviour), on the other (see Figure 1).

A match among consumer needs, their budgets, and the availability of different goods and services need not lead to consumer welfare instantaneously. While it does theoretically under conditions of **perfect competition**, in reality markets are rarely to be characterized by perfect

³ The author stresses that much of what is presented in this chapter builds on the OECD (2010) "Consumer Policy Toolkit".

competition and hence susceptible to different kinds of distortions. One such distortion is **market power**; another **imperfect information**.

Figure 1 Positioning consumer conditions within a sequential consumption process



In the context of measuring and monitoring consumer issues, making a distinction among structural market conditions, consumer conditions and consumer welfare is important for two reasons. One is about **the difference between means and ends**. While both structural market conditions and consumer conditions revolve around issues that describe means to achieve ends, consumer welfare is about the ends themselves. In addition, while the EC Consumer Markets Scoreboard intends to measure structural market conditions that operate at **the macro level**, the EC Consumer Conditions Scoreboard is about measuring and monitoring consumer conditions that operate at **the micro level** (i.e. the individual consumer). Both distinctions are not meant to suggest that no **inter-linkages exist** between these different components of the consumer issues. On the contrary, the issues involved in one component naturally feed in into the other components and hence, preferably, these inter-linkages should be taken up there as well. For example, the issue of **market integration** – though in principle an issue of structural market conditions – feeds into consumer conditions by virtue of the former changing the nature and magnitude of the latter.

In this chapter, we argue that consumer conditions revolve at the interplay between the supply of accurate information about goods and services, on the one hand, and consumers' ability to acquire, comprehend, and interpret information about goods and services, on the other. In other words, given that most consumer markets are characterized by imperfect information, consumer

conditions are about those aspects of the consumption process that either strengthen or reduce consumers' information base for making decisions.

1.1.2 The role of imperfect information for consumer conditions

Mainstream economic analysis usually starts from models of ***perfect competition*** (see e.g. Pindyck and Rubinfeld (2001)). With perfect competition, the price of a good or service equals the cost of producing an extra unit of that good or service (i.e. its marginal cost of production). Perfectly competitive markets are both allocative efficient as well as productive efficient in the long run.

Models of perfect competition are characterized by at least five conditions (see e.g. Stigler (1957) for a discussion on the nature and meaning of perfect competition). One condition of perfectly competitive markets holds that it is populated by ***many buyers and sellers***. Given this condition no single buyer or seller has the power to set prices individually. Consequently, both buyers and sellers are price takers. A second condition of perfectly competitive markets holds that there are neither entry nor exit barriers. In other words, both buyers and sellers can enter or exit the market without limitations. Third, the market is characterized by ***homogenous goods and services***. This means that goods and services on the same market have the same attributes. Fourth, perfectly competitive markets are characterized by ***perfect information***. That is, all buyers and sellers have perfect knowledge of the price, utility, uses, quality and production methods of all goods and services that are and will become available. Fifth and finally, while sellers maximize their profits, buyers maximize their utility.

Obviously, in practice – that is, in how markets operate in reality – few if any market is actually characterized by these conditions. ***Violations of these conditions*** are manifold; two of which will be discussed here. First, while models of perfect competition assume that there are many (in fact, an infinitely large amount of) buyers and sellers on a market, in reality many markets are characterized by a restricted number of sellers and buyers only. Consequently, and contrary to ideal type models of perfect competition, either buyers or sellers in fact do have a certain amount of ***market power***. Examples of such market power are found under monopolistic and oligopolistic competition (i.e. many buyers, few sellers) where sellers have a considerable

amount of market power and monopsonistic competition (i.e. few buyers, many sellers) where buyers have considerable market power. As such, either sellers or buyers do have considerable power to set prices and can hence not be taken as mere price takers. Second, instead of being characterized by perfect information, in reality markets are more often than not characterized by ***imperfect information***. As such, “consumers do not know everything there is to know about the attributes and prices of all products in the market” (OECD, 2010, p. 33). What these two violations of perfectly competitive markets have in common is that both issues of market power and issues of imperfect information hamper the transformation of consumer preferences into consumer welfare. Yet, while the former issue operates on the level of market structures (i.e. the meso and macro level), the latter issue operates on the level of individual consumer and producer behaviour (i.e. the micro level).

A characterization of markets in terms of imperfect rather than perfect competition has strong implications for (how we think of) economic welfare; both from the perspective of the demand side of the economy focusing on consumption only as well as from the perspective of the aggregate economy when consumption and production are combined. In the standard economic framework (i.e. assuming perfect competition), the ***preference satisfaction*** view sets the stage for a theory of welfare: assuming coherent preferences, any increase in income is considered ordinally equivalent to increases in satisfaction of preferences or what is often called utility (Slesnick (2001) cited in Binder and Witt (2001) p. 4). Here, structural consumer market conditions (i.e. needs, preferences, budgets, and the variety of goods and services available) naturally translate into consumer welfare.

At the aggregate level, under conditions of perfect competition ***market clearing*** takes place; that is, the quantity of goods demanded equals the quantity of goods supplied and total welfare is the sum of consumer and producer benefits (Slesnick, 1998). However, due to market imperfections, structural consumer market conditions need not naturally translate into consumer welfare. Imperfect information is one reason why structural consumer market conditions need not naturally translate into consumer satisfaction. ***Negative externalities*** (e.g. pollution or negative health side effects) form another reason for why structural consumer market conditions need not naturally translate into consumer satisfaction (Binder and Witt, 2001). The point is that ***supplier***

interests need not necessarily be in line with *consumer interests* (i.e. increasing their welfare). For example, for any individual supplier increasing profits might not be best served by securing consumer safety whilst consumer welfare obviously would be. As such, characteristics of market functioning from a supply side perspective (such as *competitiveness*) can but need not necessarily be in line with characteristics of market functioning from a demand side perspective. As a more general remark, individual consumer market conditions can be in place whilst structural consumer market conditions are not; individual consumer market conditions might be violated whilst suppliers' profitability is served. Ultimately, the extent to which these different dimensions to and perspectives on markets are aligned in practice remains an empirical issue.

Policy makers try to remedy deviations from perfect competition as to render markets to operate more closely to it. Here, policy is of two kinds; one is called *competition policy*, the other *consumer policy* (Vickers, 2003). While competition policy primarily addresses issues about market structure (see e.g. Pelkmans (2001) esp. pp. 223-245)), consumer policy primarily addresses issues about the ability of consumers to make informed choices (OECD, 2010). Given that most consumer markets are characterized by imperfect information, consumer conditions are about those aspects of the consumption process that either strengthen or reduce consumers' information base for making decisions. In other words, "consumer conditions are about issues of imperfect information" (Shapiro (1983) cited in OECD (2010) p. 34).

The classic example of markets characterized by imperfect information is discussed by Akerlof (1970) in his study of the market for used cars. In the second-hand market for cars there are used cars of good quality ("cherries") and used cars of bad quality ("*lemons*"). Often a potential buyer of used cars cannot know whether the car that is being offered to her or him is a cherry or a lemon. Consequently, the buyer's best guess will be that the car is of average quality. This, however, will drive out cherries from the used cars market as potential sellers of used cars that are above average will not be able to sell their cars at a high enough price to make selling worthwhile. Ultimately therefore, in market situations characterized by asymmetric information (i.e. situations in which sellers know more about the quality characteristics of goods and services than buyers; as is the case for the used cars market), supply will be characterized by "bads" instead of "goods." That is, in what has been called adverse selection, low quality products drive

out high quality products. In principle, however, there are a number of means to overcome the negative effects of markets characterized by imperfect information (an issue to which we will turn shortly).

The extent to which markets are characterized by imperfect information crucially depends on the nature of the goods and services involved (Nelson, 1970). Depending on the nature of the goods and services involved, information can sometimes directly be obtained from the goods and services itself. For *search goods*, quality characteristics can be observed and ascertained before purchasing the good or service. However, for *experience goods*, quality characteristics of a good or service can only be observed and ascertained after purchasing and using it. For those experience goods that consumers purchase more than once, consumers' own experience is a valuable source of information. Things become more complicated when confronted with *credence goods*. Credence goods are goods whose quality characteristics cannot be observed, let alone ascertained, by the individual consumer. Examples are nutritional goods that have potential positive health effects (such as vitamins), medical goods and services, technical repairs or maintenance (e.g. of cars or household devices), and training amongst others. For such goods it is hard to ascertain whether and to what extent the intervention of purchasing that good or service actually has an effect on the future state a consumer finds him or herself in. Note that a single good or service can often be characterized as both a search good, an experience good and sometimes even as a credence good at the same time (Wilde, 1980; Wilde, 1981). For example, when buying a used car its colour can be observed and ascertained at forehand while its functioning can be observed after the car has been used for some time only.

Overall, imperfect information has at least two dimensions to it. One dimension concerns the *supply of accurate information towards consumers*. Not only do consumers need information about the goods and services they are interested in, this information also needs to be of good quality. Another dimension to imperfect information concerns the *reception of information on the side of consumers*. Starting from the notion of bounded rationality (Simon, 1955; Simon, 1996; Kahneman, 2003; Kahneman, 2011) scholars in the field of behavioural economics have stressed that even when all relevant information would be available to consumers, it is doubtful that consumers are capable of comprehending this information (Rabin, 1998; DellaVigna, 2009).

Hence, the sources of imperfect information can be found at the side of information supply as well as on the side of consumers themselves having difficulty comprehending and interpreting the information that is available to them. In practice these two dimensions to imperfect information go hand-in-hand. The extent to which information is imperfect depends both on consumers' ability to acquire, comprehend, and process information as well as on its mere availability and accuracy. On one extreme, information can be completely available but as long as consumers cannot completely acquire, comprehend, and process this information, it is of little use. On the other extreme, even if consumers can fully acquire, comprehend, and process all information; as long as information is not completely available and accurate, this ability will be of little practical value. Hence, the extent to which information is imperfect will be the result of the interplay between these two dimensions (Stigler, 1961).

Notwithstanding the inherent interplay between the two dimensions of imperfect information (i.e. the supply of accurate information and the consumers' limited abilities to make rational decisions), they raise distinct analytical issues. While issues revolving the supply of accurate information have been addressed primarily in the *early literature on imperfect information*, recently *behavioural economics* has centred on consumers' limited ability to make rational decisions from the information that is available to them. In what follows, we will briefly address both literatures in turn. First, the early literature on imperfect information (for an overview of this literature see e.g. Stiglitz's (2002)) came up with numerous mechanisms that resolve imperfect information from the side of the supply of (accurate) information. Getting back to Akerlof's (1970) classic paper on the market for lemons, circumventing the issue of imperfect information from the side of information supply can be done through the provision of *warranties and guarantees*. A warranty or guarantee provides assurance by one party to another about the quality of particular attributes of a good or service. For example, sellers of new cars or appliances typically include a warranty or guarantee that make a promise to the buyer that the car or device will not malfunction for a certain amount of time. If the car or appliance does malfunction within the specified amount of time, buyers are often entitled to either get their money back, to get the car or device repaired free of cost or to get a new car or device altogether.

Screening provides another solution to imperfect information (Arrow, 1963; Spence, 1973; Stiglitz, 1975). Although especially used with reference to the labour market, in the context of consumer conditions screening can refer to buyers being allowed to examine the attributes of a good or service before actually purchasing it. As such, attributes which are not observable before use can be observed within the screening period. Trial periods are an example of screening as they allow consumers to experience a good (and hence potentially hidden attributes of a good) before definitely purchasing it.

Labels provide another instrument for assuring the availability of more and accurate information about goods and services (Akerlof, 1970). In short, labels are made of a brief description added to a good or service as to provide extra information about that good or service that cannot be discerned from observing the good or service alone. Unlike warranties and guarantees, labels do not necessarily assure the quality of certain attributes of goods and services. Rather, they render extra information about the goods and services more directly. At an even more basic level then, one way of giving consumers more information is provided by **advertising** (Nelson, 1974). That is, advertisements or marketing initiatives more in general provide buyers signals about the attributes of goods and services that are not necessarily observable from the goods and services directly. As such, advertisements provide an extra source of information on top of the goods and services themselves. However, not all forms of advertising inform consumers properly. That is, instead of solving imperfect information advertising can aggravate imperfect information in being misleading or deceptive.

Second, on issues revolving consumers' ability to acquire, comprehend, and interpret information about goods and services, **behavioural economics** has recently made some insightful contributions (Rabin (1998) and DellaVigna (2009) and references made therein). While mainstream economics assumes that consumers make choices on the basis of stable and coherent preferences, clearly and correctly specified pay-offs, and decision making conceived as an optimization problem; behavioural economics takes issue with all of these three basic assumptions. With respect to preferences, for example, it has been shown that consumers value immediate payoffs disproportionately more than payoffs in the immediate future but are far more indifferent between payoffs in the immediate future and payoffs in the further future. That is to

say, discounting of payoffs is steeper in the immediate future than in the further future and hence preferences are not time-consistent as assumed within mainstream economics (DellaVigna, 2009). Another example of *unstable preferences* has been attributed to loss aversion. People tend to place a higher value on losses than they do on gains while in principle (i.e. under stable preferences) the negative value placed on a loss of €1.00 should be as high as the positive value placed on a gain of €1.00. Finally, consumers are not completely rational in taking into account their own payoffs only but also take into consideration the payoffs for others. In other words, in making decisions, consumers' welfare does not just depend on their own preferences but also on the perceived preferences of others.

As to the specification of payoffs, research in behavioural economics shows that *consumers' belief systems are systematically biased* (see again Rabin (1998) and DellaVigna (2009) and references made therein). That is, consumers are overconfident in their ability to gather, process, and make inferences from the information that is available to them; consumers are subject to the law of small numbers (i.e. consumers tend to hastily generalize based on small amounts of information only) (Tversky and Kahneman, 1971; Rabin, 2002); and consumers tend to believe that today's preferences closely resemble tomorrow's preferences (a phenomenon known as projection bias (Loewenstein et al., 2003)) which lead them to make choices which they might regret later. Finally, behavioural economics takes issue with characterizing decision making as an optimization process. Starting with Simon (1955) and his notion of bounded rationality, behavioural economics has drawn attention to the impact of framing on decision making outcomes (Tversky and Kahneman, 1981), the impact of *myopicness* on decision making outcomes (i.e. consumers only pick up a sub-set of information from all the information available to them), the impact of *sub-optimal heuristics* on decision outcomes (Tversky and Kahneman, 1974), the impact of social pressure (Akerlof, 1991) and the impacts of persuasion and emotions on decision outcomes. What holds for all of these aspects influencing the choice behaviour of consumers is that consumers can hardly be thought of as maximizing their welfare.

It holds for both dimensions (i.e. the supply and the reception of information) that solutions to imperfect information can be brought about by many different agents; be it firms, governments or (informal) consumer networks. In addition, like imperfect information itself, solutions to it

operate at the interplay of on the one hand consumers' ability to acquire and process information about goods and services on the other hand the insufficient or improper provision of information about goods and services. Take for example *cooling-off periods*. Cooling off periods allow and sometimes even force people to delay a purchasing decision. Cooling off periods thus enable people to re-evaluate their decisions for some specified period of time. Cooling off periods might either delay the decision itself or render them reversible (Camerer et al., 2003). While in the former case a decision is postponed till a later moment (i.e. after the cooling off period), in the latter case a decision is taken but can be recalled within the cooling off period. In both instances, cooling off periods address the issue of projection bias discussed above by preventing consumers to make decisions in emotionally hot states which they later might regret (Bell, 1967). As such, cooling off periods are in part oriented at issues revolving the reception of information by consumers (Camerer et al., 2003). However, as cooling off periods allow consumers to get extra information about a good or service within a certain period of time, it also serves as mechanism that increases the supply of information that reaches the consumer.

Another example whereby the supply of information to consumers interacts with the reception of information by consumers concerns the issue of *information overload*. Information overload refers to a situation in which consumers have difficulty in making decisions due to the presence of too much information about goods and services (relatedly, see also Schwartz (2004) on "the paradox of choice"). Given the inherent inability of consumers to handle ever more information; more information does not necessarily mean that consumers will make better informed decisions. From the side of suppliers, there is a *trade-of between providing completely correct information and (not) providing information at all*. The more suppliers can be held accountable for providing incorrect information, the less they are inclined to provide information at all. Note that suppliers might not (yet) be aware about possible negative effects of their goods and services. Also, there might be a difference between how (accurate) information is provided by suppliers and how it is actually interpreted by consumers. Information can be framed in such way as to convey a different message for different groups (e.g. suppliers versus consumers). What holds in general then is that (i) solutions to issues revolving information availability need not be in line with solutions to issues revolving bounded rationality and (ii) the extent to which information is considered accurate crucially depends on the cognition of both suppliers and consumers.

1.1.3 Concluding remarks: implications for policy and measurement

In sum, economic theory emphasizes that consumer conditions are shaped by the interplay between the supply and reception of information about goods and services. Likewise, measures to improve consumer conditions (such as warranties and guarantees, labels, screening opportunities, and cooling-off periods) are concerned with both the supply of accurate information and consumers' abilities to acquire, comprehend and interpret information about goods and services. All this, however, is not to suggest that remedies for imperfect consumer conditions should necessarily be provided by governments. For one thing, *the extent to which government intervention is taken to be acceptable crucially depends on the normative perspective one has on consumer welfare* in the first place (compare for example Thaler and Sunstein (2009) with Sugden (2004); see also Binder (2013)). Also, measures to improve consumer conditions can be provided not only by governments but also by firms and (informal) consumer networks. What holds at the very least then is that any metric on consumer conditions should duly take into account both the supply and reception of information and both market and non-market aspects to resolving imperfect information. In the following chapter, we discuss the main regulatory measures adopted at the EU level in order to elicit fair supplier behaviour and ensure adequate consumer protection.

1.2 Key concepts of consumer conditions in the EU context

Violeta Piculescu

This chapter reviews regulatory measures for consumer protection and fair trading implemented at the EU level. We explain the main concepts of consumer conditions and their implementation by the EU Directives reviewed. The chapter discusses also the concept of consumer detriment and possibilities for seeking redress through entities of alternative dispute resolution (ADR).

1.2.1 The EU dimension of consumer conditions

The conventional policy approach of consumer conditions addresses the protection of consumers against insufficient information provided by suppliers with respect to the products supplied and terms and conditions of purchase, and against unfair commercial practices and consumer scams of rogue suppliers. In Europe, governments' efforts to strengthen the protection of consumers in national markets were complemented initially by initiatives at the EU level aimed at introducing minimum standards of consumer conditions across the common market. Examples of EU minimum standards include mandatory provision of information, indication of unit prices, trader's liability for deficient products and services and consumer remedies, the right of consumers to withdraw from a transaction concluded in circumstances that weaken the consumer's negotiating position, and conditions for fair play advertising.

The early EU approach of common minimum standards for the protection of EU consumers, however, did not prove sufficient for a smooth development of the EU internal market. Given the minimum harmonization stance adopted, Member States had the possibility to implement different provisions relative to the standards set in the EU Directives, thus generating a fragmented legislative landscape. As a result, divergent national consumer rights and trading conditions did little to foster the confidence of consumers in cross-border shopping and the ability of suppliers to compete in countries other than their own. Consumers proved reluctant to shop in other countries due to the uncertainty associated with different rights enforceable in these countries, while suppliers were confronted with higher transaction and regulatory costs related to compliance with other national provisions on consumer protection.

Over time, these detrimental effects of differing levels of consumer protection across the EU have become even more apparent with the onset of the digital revolution. The rapid development of online selling and marketing methods coupled with the unprecedented growth in the use of the internet have boosted significantly the opportunities offered by the EU internal market. The implication of the digital upheaval is twofold: commercial and regulatory. From the commercial perspective, consumers have now a wider choice of products at their disposal, while suppliers can access larger markets.

From the regulatory point of view, however, the significant changes in the trading and purchasing behaviour require a renewed focus on conditions in which consumers shop and suppliers trade across countries. First, the increasing reliance on online advertising and shopping means a higher prevalence of transactions concluded between consumers and suppliers located in different countries. This type of distance contracts requires a stronger protection of consumers, at the very least in terms of type and accuracy of information that sellers provide to their buyers, and of streamlined conditions to withdraw from a transaction, if so wished. Second, given that they can reach easily to wider pools of consumers throughout the EU, suppliers can now take advantage of economies of scale and customize their offers for specific categories of customers, including less savvy shoppers such as teenagers. A higher exposure of vulnerable consumers to commercial persuasion increases the necessity of measures that, on the one hand, strengthen consumers' negotiating positions and, on the other hand, dissuade suppliers from taking advantage of their, often remote, customers. And third, the expansion of digital products such as computer programs, applications, music and video, games and e-books require an adaptation of existing regulatory measure such that they can take full account of the conditions in which these products are sold and purchased.

These developments have led to the realization that the extent to which market participants can tap into the growing potential of the internal market is conditional on a common framework for consumer conditions at the EU level. Such a framework should enable consumers to exercise their rights without significant obstacles when ordering products from another EU country, and it should meet suppliers' reasonable expectations on coherent compliance terms across the Member States. As a result, there has been a change in philosophy at the EU level over time: if, initially,

the basis for the EU regulatory stance with respect to the protection of consumers was minimum harmonization, full harmonization that enables a level playing field throughout the common market has now become the norm. The two most recent EU initiatives on consumer protection, the “Unfair Commercial Practices Directive” (Directive 2005/29/EC), and the “Consumer Rights Directive” (Directive 2011/83/EU), aim at replacing many divergent legislative national measures with common EU standards of consumer protection. They also tackle explicitly the regulatory challenges brought about by the digital economy.

In the remaining of this chapter, we introduce the main concepts of consumer rights, contractual remedies, commercial practices in business-to-consumer transactions, and the mechanisms of redress available to consumers as reflected primarily by regulatory initiatives at the EU level and their implementations in the Member States. An overview of the EU legislation measures and recommendations on the general consumer issue is presented in appendix.

1.2.2 Consumer rights, contractual remedies and misleading commercial practices

Trade thrives on trust. Consumers need to be confident that they have all the information they need to make their decision to purchase, that the products they buy are fit for purpose, that they are free to choose among the offers available in the market, that they pay a fair price for what they get, and that they have the possibility to seek remedies when problems occur. Suppliers, on the other hand, should have the opportunity to promote their products in good faith and to protect their commercial image, to offer sale and after-sale conditions without being undercut by unfair competition, and to be subject to requirements for compliance with regulatory measures which are commercially viable. In sum, both sides of a transaction need to be confident that they can make their trading decisions on a reliable basis, that transactional risk is fairly distributed between them, and that possibilities to address specific contingencies match reasonable expectations.

From a regulatory perspective, the conduct of transacting parties is driven to a large extent by rights and remedies that consumers are entitled to, on the one hand, and by regulatory bans on unfair commercial practices, on the other hand. In consumer sales contracts, the most prevalent type of contract between consumers and suppliers, consumer rights cover primarily issues related

to pre-purchase information requirements, indication of unit prices, conditions for delivery and payments, conformity of products and remedies for lack of conformity, and, more generally, balanced contractual terms. For transactions deemed to put the consumer in a more vulnerable negotiating position, such as in distance and off-premises selling contracts, measures of consumer protection focus on stricter information requirements for the trader, and on the provision of a reflection (i.e. cooling-off) period and the right of withdrawal from the transaction. Finally, a trader's fair conduct relative to both consumers and its competitors is addressed by legislative measures that prohibit misleading advertising, misleading actions and omissions of relevant information, and aggressive commercial practices.

There are a number of EU legislative initiatives that address issues of consumer conditions that cut across the variety of commercial transactions between consumers and suppliers. Some of these directives cover general consumer sales contracts, such as Directive 98/6/EC on the indication of unit prices of products offered to consumers, Directive 1999/44/EC on certain aspects of the sale of consumer goods and associated guarantees, and Directive 93/13/EEC on unfair terms in consumer contracts. Other EU Directives tackle specifically the commercial practices of suppliers such as off-premises and distance selling methods. These include Directive 85/577/EEC on contracts negotiated away from business premises and Directive 97/7/EC on the protection of consumers in respect of distance contracts. Bans on trader's misconduct are introduced by Directive 84/450/EEC on misleading advertising to consumers, Directive 97/55/EC on misleading advertising so as to include comparative advertising, and Directive 2005/29/EC on unfair business-to-consumers commercial practices in the internal market. Most recently, the Directive 2011/83/EU on consumer rights establishes common EU standards for transactional terms both for general consumer sales contracts and for off-premises and distance contracts.

When discussing these regulatory measures, we begin by introducing the EU standards for the terms of trade in general contracts between consumers and suppliers, and continue with the specific issues of off-premises and distance selling and unfair commercial practices.

1.2.3 General consumer sales

A general consumer sales contract covers consumer goods, services, and digital content supplied by a trader to a consumer. The trader in this context is a legally established entity or a natural person acting as a trader supplying goods / services in the normal course of business, while the consumer is an individual who buys the goods / services for own use or consumption. Consumer goods usually cover durable and nondurable goods, but on occasion they also refer to water, electricity and gas supplied to individual consumers. Examples of common consumer goods include a myriad of products, from bread to iPads. Consumer services, on the other hand, are typically intangible products that are produced and consumed simultaneously; some of the services are supplied on a recurrent contractual basis. Examples range from hairdressing, car repairs, house cleaning and house renovation, to TV broadcasting and telecommunication services.

When making their purchasing decisions, consumers often need to compare several similar products available in the market, and one essential input for this evaluation is the price. For consumer goods that can be sold in quantities different from one standard unit of measurement such one kilogram, one metre, or one litre, the basis of cost comparisons should be the unit price of the product, as opposed to the selling price typically displayed by retail suppliers. For example, the comparison between the cost to the consumer of a 250 gr pack of sugar of brand X with the cost to the consumer of a 350 gr pack of sugar of brand Y is more straightforward if based on the respective unit prices of one kg of sugar from both brands, as opposed to comparing the selling prices of the two packs on the shelf.

With this view in mind, the EU Directive 98/6/EC (Indication of Unit Prices Directive) establishes the minimum general obligation for suppliers operating in the internal market to display both the selling and the unit prices for all products sold in quantities different from one kilogram, one litre, one metre, one square metre, or one cubic metre, or other single units of quantity customarily used in some EU Member States. The Indication of Unit Prices Directive applies to all products, with the exception of the ones sold in bulk, and it also covers advertisements of products which include selling prices. In order to prevent imposing excessive regulatory burdens, however, the Directive provides for a transitional period during which the

small retail businesses selling non-food products could be exempted from this obligation under certain circumstances determined based on the number of product on sale, the area of sale, the nature of the location of sale, or the form of business such as itinerant sales.

The implementations of the Indication of Unit Prices Directive in the Member States reflect the nature of minimum harmonization of the Directive. The Commission report on the implementation of the Directive (COM 2006 325 final) discusses the different provisions related to unit prices included in national laws of the Member States. With respect to the products for which suppliers are exempted from the obligation to indicate unit prices, it has become apparent that Member States have chosen different criteria for establishing these exemptions. Such exemptions include, for example, products sold through automatic vending machines, products sold for immediate consumption (such as ice cream, pastries and cakes), products sold individually (such as surprise chocolate eggs or chewing gum), or products with a controlled denomination of origin or a typical geographic indication. With respect to requirements for the display of prices, examples of country specific rules include placing both the selling and the unit prices in the same visual field or the display of both prices with same size font. National rules are different also when it comes to the exemption of small businesses from the obligation to display unit prices. The majority of the Member States have waived this obligation based on the area of total sales of the business, while some countries have chosen the number of employee as a criterion for exemption. Furthermore, derogations are provided for sales over the counter, as opposed to self-service outlets. With respect to the transitional period, only one Member State has established a precise date when exemptions for small businesses expire. The majority of Member States either did not introduce a limited period, or did not even mention that the derogation is to be temporary.

Another essential input for the purchasing decisions of consumers is the assurance that the goods they buy comply with the marketed specifications on the characteristics, quality and performance of the products. This assurance comes in the form of the legal guarantee that gives consumers the right to have a good repaired or replaced in case the quality and the performance of the good purchased do not comply with the description at the time of purchase.

Minimum EU standards for guarantees in relation to sales of consumer goods are established by the EU Directive 1999/44/EC (Sales Directive). The Sales Directive covers sales of consumer goods only, and it includes provisions for legal guarantees and remedies that the suppliers must offer to consumers for the lack of conformity of goods. With respect with the commercial guarantees offered in addition voluntarily, they must be written in plain, intelligible language, they must include relevant information such as the conditions for making claims, the territorial scope of the guarantee and the details for the guarantor, and they should not confuse the consumer with respect to the right to the legal guarantee. Remedies available to consumers should include primarily repair or replacement of the defective products, should be offered free of charge, and they should be performed without unnecessary delay and with least inconvenience for the customers. Furthermore, in case neither repair nor replacement is possible, the consumer should receive a reduction in price or have the possibility to cancel the transaction. The legal guarantee holds for a period of two years from the time of delivery, and the consumer should have the right to at least two months to notify the trader from the moment he discovers that the product is defective. The Directive also includes provisions on guarantees for second-hand goods, and the possibility for the trader to pursue further remedies against the manufacturers of the defective goods.

The Commission report on the implementation of the Sales Directive (COM 2007 210 final) indicates that, although they all introduced the right to legal guarantees for defective goods in their national laws, Member States have chosen to implement provisions which depart from the minimum standards established in the Directive on certain aspects. With respect to the moment when the consumer becomes aware of product defects, for example, some EU countries either did not define this moment in their laws, or they established that the consumer would lose all his rights for remedies in cases of defects which he should have noticed immediately at the time of delivery (and did not). As regards remedies, some countries strengthened the consumer rights by introducing the possibility that consumers rectify defects themselves and have the right to withhold payment, while others chose not to include explicit consumer rights in situations where the trader does not manage to provide remedies without significant inconvenience, or within a reasonable time. The time limit on the validity of the guarantee is another example of differing national provisions. While a majority of EU countries have chosen the two years period

introduced by the Directive, some EU countries that have opted for different solutions, such as: a three years period from the time of delivery, or varying time limits depending on the goods (for example, two years for consumer goods, three weeks for foodstuff, and eight days for groceries). A number of Member States have also introduced the possibility of extending the period of the guarantee after the defects notified by the consumer are remedied.

A broader protection of the contractual terms afforded to the consumer has been introduced by the EU Directive 93/13/EEC (Unfair Contract Terms Directive), considered a milestone of consumer policy at the EU level. The Directive aims at ensuring that, in the course of drawing up a contract, no undue risk is being passed by the trader onto the consumer. It applies to contractual terms which have not been individually negotiated with the consumer, defined as terms established by the trader in advance and which the consumer has to accept as given, with no possibility to negotiate prior to entering the transaction. The Unfair Terms of Contract Directive provides two ways to assess the unfairness of contractual terms: 1) a general criterion stating that a contractual term is deemed unfair if it induces a significant imbalance in the contractual rights and obligations assumed by the parties to the transaction, to the detriment of the consumer, and 2) an indicative list of unfair contractual terms including clauses with effects such as: limitation or outright exclusion of legal rights of the consumer, discretionary termination of the contract to the advantage of the trader, the possibility for the trader to alter unilaterally the terms of contract or the characteristics of goods or services supplied without a valid reason specified in the contract, and charging the consumer disproportionately high amounts in case he fails to fulfil his contractual obligations. The Directive provides that, should such terms be included by the trader in a contract not negotiated directly with the consumer, they would not be binding for the consumer.

The implementation of the Unfair Contract Terms Directive is analysed in the Commission report COM (2000) 248 final. Based on data collected in the CLAB database, a project launched by the Commission after the adoption of the Directive, the report reveals the prevalence of particular types of unfair contract terms employed by suppliers. Of all cases concerning unfair contractual clauses registered in the database up until year 2000, 16% concerned clauses with the effect of waiving or limiting of trader's obligations with respect to the conformity of goods and

services supplied and conditions of delivery, 13 % concerned the clarity and intelligibility of general terms and conditions, 9% were related to prices and payments, and the remaining ones concerned various terms and conditions for contract performance and procedures for the termination of the contract, all to the detriment of the consumer.

The COM (2000) 248 final report also indicates that the implementation of some of the provisions of the Directive proved challenging. One limitation, for instance, refers to the definition of individually negotiated contractual terms, which serves to establish the scope of application of the Directive. Because the Directive is primarily meant to apply to all pre-formulated standard contracts, some firms proved innovative in finding ways to circumvent the national rules transposing the Directive by creating pre-defined contracts in which the customer declares he had negotiated and explicitly accepted the general terms and conditions. Further difficulties were incurred with respect to the list of unfair contractual terms applicable in a country. In the context of their own legal order that outlaws unfair contractual terms, some Member States did not adopt the indicative list of terms provided by the Directive on the grounds that it might create confusion and even defeat its own purpose due to the ambiguous wording of the terms. Nevertheless, many of the Member States went beyond the provisions of the Directive by adopting mandatory lists of contractual terms deemed to be unfair. Finally, an equally significant problem is generated by differing national approaches of sanctioning suppliers for the use of unfair contractual terms. First, at the time of the Commission report, in most Member States only the courts had the power to prohibit the use of such terms, implying that consumers had to go through lengthy legal proceedings in order to be freed from the offending contract terms. Second, given that a court order would apply to the wording of a given formulation of a contractual clause, rather than to its effects, a banned specific formulation would not prevent the trader to circumvent the judgment by replacing the offending clause with another one which was also unfair. Some Member States have tried to tackle this issue by creating a register of unfair contractual terms banned by court decisions, and which could be referred to in any other national court.

The rights of consumers to receive adequate information on the terms of trade from the suppliers have been significantly furthered with the adoption of the Directive 2005/29/EC (Unfair

Commercial Practices Directive) on unfair business-to-consumer commercial practices in the internal market. The Directive has a broad scope of application, as it covers business-to-consumer practices, including advertising, sales promotions, offline and online commercial practices, and all types of selling contracts of goods or services (SEC 2009 1666). It aims at protecting consumers against misleading and aggressive commercial practices of suppliers and, in doing so, it establishes the obligation of suppliers to provide consumers with key items of information whenever they make an offer that can trigger a decision to purchase. More specifically, the trader is required to provide the consumer with the following details: the main characteristics of the goods and services supplied, the identity of the trader (trading name, address, location, contact details), total price including taxes and any additional charges that may apply, the conditions for delivery, payments and contract performance, the complaint handling policy, and the existence of the right of withdrawal (if appropriate).

With respect to principles underlying consumer protection in the common market, the Unfair Commercial Practices Directive introduces three key elements in the EU legislative framework. First, the Directive adopts the benchmark of the average consumer, who is taken to be “reasonably well-informed and reasonably observant and circumspect, taking into account social, cultural and linguistic factors” as defined by the European Court of Justice (Directive 2005/29/EC). This implies that consumers are not expected a priori to be fully informed and all wise whenever they interact with a trader. The Directive also addresses the issue of vulnerable consumers, defined as consumers whose characteristics in terms of age, physical or mental infirmity, or credulity make them vulnerable to unfair commercial practices. Suppliers are required to take account of these factors when making their offer, without taking advantage of consumers’ vulnerability. Second, the Directive applies to all stages of the transaction, meaning before, during and after a commercial transaction is concluded. And third, it is a full harmonization initiative that establishes common standards of consumer protection in all sectors, with the exception of financial services and immovable property where the minimum harmonization provision is maintained.

Further elaboration of information requirements prescribed for suppliers is included in the Directive 2011/83/EU (Consumer Rights Directive). The Consumer Rights Directive covers a

large majority of transactions between suppliers and consumers, including also contracts for the supply of digital content, the supply of water, electricity and gas when provided on a contractual basis, and contracts for services such as house renovation and repair, services of real estate agents, rental of accommodation for non-residential purposes. The Directive includes both general provisions for consumer sales contracts, and specific provisions applicable only to distance and off-premises selling contracts. As with the Unfair Commercial Directive, the Consumer Rights Directive aims at harmonizing fully the consumer conditions across EU countries, and it will apply to business-to-consumer contracts concluded after 13 June 2014.

In terms of information requirements, the Directive reiterates the trader's obligation to provide the consumer with all the information he needs in order to make an informed decision to purchase, and it distinguishes explicitly between requirements applicable to off-premises and distance contracts, and requirements for contracts other than the off-premises and distance ones. Compared to the Unfair Commercial Practices Directive, the Consumer Rights Directive includes an explicit additional requirement for general contracts: the trader's obligation to remind the consumer about his legal right to a guarantee for the conformity of products, in order to not confuse it with commercial guarantees that might be on offer. The Directive addresses also issues related to the supply of digital products, instructing suppliers to provide details on the functionality of the digital product (including technical restrictions such as region coding or Digital Rights Management), and its compatibility and interoperability with hardware and software. Further, it establishes that, if the trader does not comply with the information requirements on additional charges or other costs, including costs of returning the goods, the consumer will not have to pay those costs.

The Consumer Rights Directive also establishes more precise conditions for the delivery and payments of the goods and services transacted. It provides for a maximum period of delivery of at most 30 calendar days from the time when the consumer places the order. If delivery is delayed beyond this time limit, and if appropriate for the circumstances, the trader can agree with the consumer on an additional period of time. Should the trader fail to perform the delivery even after this additional period, however, the consumer is entitled to terminate the contract, and the trader is obliged to reimburse all the amounts received from the consumer for the goods or

services not delivered. As regards payments, the trader needs to obtain the explicit consent of the customer for any payment in addition to the amounts agreed upon for the supply of goods or services. This provision is aimed at preventing the use of default options which, for certain contracts, the consumer is obliged to reject in order to avoid an extra payment. If the trader chooses to attach such default options to the conditions of a contract without the explicit consent of the consumer, the latter is entitled to have the corresponding amount reimbursed.

Further on payments and the use of means of payments, the Directive establishes an obligation for suppliers to inform consumers about any deposit to be paid, including arrangements to block amounts on consumer's payment card. It also prevents suppliers from charging the consumers more than the costs the suppliers incur with the use of the means of payments.

1.2.3.1 Off-premises and distance contracts

Terms and conditions provided for in general selling contracts are sometimes not enough for an adequate protection of consumers. There are circumstances where the consumer is likely to be in a weaker negotiating position relative to the trader, and therefore vulnerable to the effects of insufficient pre-sale information or persuasion methods practiced by the trader. Such circumstances are most apparent for off-premises and distance selling transactions.

In off-premises selling transactions the contract between the trader and consumer is initiated and/or concluded outside the premises of the business. Such contracts include any transaction for which the consumer is either approached or concludes the contract outside the business premises, including doorstep selling (also referred to as direct selling) whereby the consumer is approached and agrees on the contract at his home or workplace. The specificity of these circumstances is that consumers may be under psychological and emotional pressure to accept rather too hurriedly the contractual terms offered by the trader.

Distance selling, on the other hand, includes transactions initiated and concluded exclusively by means of distance communication such as telephone and, increasingly, the internet. With distance selling the transacting parties do not meet to discuss the terms of trade in person in a

given physical location, and the consumer has more limited possibilities to inspect and assess the characteristics of goods or services before making a decision to purchase.

In order to promote fair playing among suppliers and help strengthen the contractual position of the consumer in the context of off-premises and distance selling contracts, regulatory measures of consumer protection insist on the trader's obligation to provide consumers with written confirmation of the terms of trade in due time, and entitle the consumer to a reflection period, also called a cooling-off or withdrawal period, and to the right to withdraw from the transaction without giving any reason. Additional provisions refer to conditions of delivery and payments, and to the supply of unsolicited goods and services.

In the EU context, the terms for the obligation of suppliers to provide consumers with sufficient information that would enable an informed decision to purchase in the context of off-premises and distance selling contracts have evolved over time. The Directive 85/577/EEC (Doorstep Selling Directive), the earliest EU initiative on minimum standards for contracts negotiated and concluded away from business premises, establishes the obligation for the trader to provide the consumer with a written notice on the cooling off period and the right of withdrawal, together with details of conditions in which this right might be exercised. With respect to distance selling, however, Directive 97/7/EC (Distance Selling Directive) is more explicit in that it requires the trader to inform the consumer in good time prior to the conclusion of the contract with respect to the terms of trade, and to send a written confirmation in a clear and comprehensible format including the following: the conditions and procedures for exercising the right of withdrawal, the identity of the trader (name and geographical address), conditions for complaint handling, information on after-sale services and guarantees, and conditions for cancelling the contract (if appropriate). In cases of services, the Distance Selling Directive establishes that the trader must fulfil his obligation to send the written confirmation within a period of at most three months.

Subsequently, the Consumer Rights Directive introduces additional information requirements for off-premises and distance contracts, including: the cost of using the means of distance communication for the conclusion of the transaction, if different from a base rate, the information on the existence or absence of the right of withdrawal and the procedures to exercise

it (if applicable), the existence and conditions of any advance payments and deposits that the consumer would incur with the conclusion of transaction, the codes conduct the trader adheres to (if any), and the consumer's possibility to seek redress through out-of-court proceedings (if available). The Directive maintains the trader's obligation to send a written confirmation of the contract within a reasonable time after the conclusion of the contract, and at the latest at the time of the delivery of the products or before the performance of a service begins. A more limited set of information requirements applies to off-premises contracts for repairs or maintenance work requested by the consumer.

In the EU legislative framework, the provision of cooling off periods and the right to withdraw from a transaction without giving any reason is mandatory for off-premises and distance selling transactions. In case of off-premises contracts, provisions for the cooling off period and the right of withdrawal serve two purposes: they give the consumer time to reflect on the terms of trade agreed upon and the possibility to compare the goods or services purchased with other alternatives available in the market. In case of distance selling, however, the main purpose of the cooling off period and the right of withdrawal is to enable the consumer to inspect the characteristics, quality and performance of the goods or services ordered remotely.

For doorstep selling contracts, the Doorstep Selling Directive entitles the consumer to a reflection period of at least seven days starting from the receipt of the written notice on terms and conditions from the trader. During this interval, the consumer can decide to withdraw from the transaction without giving any reason, and without incurring any penalties. If he decides to do so, he needs to notify the trader before the cooling off period expires, and the trader has the obligation to reimburse the consumers for any payments made for goods or services contracted. In case of distance contracts, the Distance Selling Directive establishes a cooling off period of similar length, but it provides for a different method of calculation of the interval. In case of goods, the seven days for reflection start counting from the day when the customers receive the goods, while in case of services, the cooling off period starts either from the day when the contract is concluded or from the day when the customer receives the written notice on terms and conditions from the trader. In case the trader fails to send the written notice on terms and conditions, the cooling off period is extended to three months. When the consumer exercises his

right of withdrawal from a distance selling contract, the only charge he needs to cover is the direct cost of returning the goods to the trader. The trader's obligation is to reimburse the consumer free of charge and as soon as possible, but no later than 30 days after receiving the consumer's notification of withdrawal.

Both the Doorstep Selling Directive and the Distance Selling Directive provide for a minimum harmonization of terms and conditions of doorstep and distance selling contracts across the EU, thus allowing Member States to adopt or maintain more stringent provisions for consumer protection. Indeed, the Commission report COM (2006) 514 final on the implementation of the Distance Selling Directive indicates that, at least with respect to distance selling contracts, Member States have transposed the requirement for a cooling off period in a variety of ways, the most frequent being 7 working days or 14 calendar days.

The Consumer Rights Directive, with its full harmonization approach, lays the ground for a common set of standards for the cooling off period and the exercise of the right of withdrawal across the EU Member States. The Directive establishes that the consumer is entitled to a withdrawal period of 14 calendar days for all distance and off-premises contracts. For goods, this reflection period starts from the day when the consumer receives the goods, and for services, the reflection period starts from the day of the conclusion of the contract. If the trader did not inform the consumer with respect to the right of withdrawal, as required, then the withdrawal period is extended with a period of 12 months. In order to exercise his right of withdrawal, the consumer has to notify the trader that he wishes to withdraw from the transaction and send back the goods received before the cooling-off period expires. The trader has the obligation to reimburse all the amounts received in relation to the contract from the consumer without undue delay and not later than 14 days from the day he was notified by the consumer. The right of withdrawal is provided also for digital products, provided that the consumer has not explicitly accepted to begin the contract performance during the withdrawal period and, consequently, waive his right to withdraw from the transaction. Nevertheless, given that the Consumer Rights Directive repeals the Doorstep Selling and Distance Selling Directives starting with 13 June 2014, the extent to which these standards are already implemented across EU countries is not yet clear.

With respect to delivery and payments, the Directive establishes that, in the event of failure to deliver the products, the trader must inform and possibly reimburse the consumer as soon as possible, and no later than 30 days after the placement of the order. The Distance Selling Directive also entitles the consumer to a cancellation or full reimbursement of payments if his payment card had been used fraudulently in relation to the distance contract.

Another provision that protects consumers against pressure trading methods in distance selling addresses situations where the consumer receives unsolicited goods and services and is asked to pay for them, a practice referred to as “inertia selling.” An automatic remedy against inertia selling has been provided for in the Distance Selling Directive, and reiterated in the Unfair Commercial Practices and Consumer Rights Directives, and it implies the following: if the consumer receives goods or services he had not solicited, he has no obligation to provide any consideration (reply, return of goods, or payment) to the trader. In these cases, absence of a response is not interpreted as consent.

1.2.3.2 Unfair commercial practices, and consumer scams

Competition in markets reinforces consumer protection by providing suppliers with incentives to be efficient, to innovate, to create and nurture brands of products, and to implement sales services that cater to the satisfaction of their customers. Market mechanisms, however, are better suited to fostering competitive behaviour over medium to long term, and less adapted for sanctioning opportunistic, short-term oriented suppliers. The unprecedented expansion of trading opportunities offered by the common market coupled with the increasing speed at which transactions can take place today also offer the temptation of a quick euro. As a result, some suppliers find it profitable to lure consumers into quick deals through misleading or aggressive selling tactics.

Unfair commercial practices affect directly consumers and honest suppliers, and ultimately the growth of markets at large. Experiences with deceptive offers and harassing sales methods undermine consumers’ confidence in the trading environment, thus preventing them from taking advantage of the opportunities created by modern commerce. Consumers, for instance, will become reluctant to shop online, or to purchase products from other countries. To the extent that

it also affects honest suppliers, this lack of confidence can prove contagious. Suppliers, and in particular small businesses, will find it difficult to grow in an uncertain environment where quality cannot be discerned from “lemons,” and where fair-play competition is optional.

Unfair are commercial practices which distort or manipulate consumers’ perceptions with respect to the characteristics, performance and availability of a product on offer, or which confuse consumers with respect to the manufacturer of the product. Typically, such practices rely on incomplete, ambiguous or even inaccurate information, and on selling methods that appeal to emotional states or desires for instant gratification. Examples include the use of misleading and deceptive information in advertisements, misleading comparative advertising, hidden advertising, the use of default options and unnecessarily complex wording in contracts, omission of key information relevant for an informed decision to purchase, reliance on bait and switch selling tactics, pressure and aggressive selling practices, and consumer scams. The effectiveness of such methods is enhanced by consumers’ vulnerabilities, especially in terms of age (children, teenagers, elder individuals), a mental or physical infirmity, or credulity (SEC (2009) 1666).

Misleading and deceptive advertising means any advertising which confuses and deceives the audience to whom it is addressed or whom it reaches, and it distorts the economic behaviour to the detriment of consumers and competitors. Further, misleading comparative advertising creates confusion between the advertiser and a competitor with the objective either to take advantage of the reputation of a well-established trademark, or to belittle products of competing trade names. Examples of misleading and deceptive advertising include making false claims to follow a code of conduct or to have the endorsement of a public or private body, displaying trademarks without authorization, misleading the consumer into thinking that a product belongs to a reputable brand (copycat products), creating confusion with competitors’ products due to similar packaging, making inaccurate or exaggerated claims on the performance of products (such as miracle products or fast cures), or making false or otherwise misleading environmental claims. Deception of consumers is also present in practices that entail claiming that buying a product would facilitate winning a game of chance, promising to award a prize in case of a purchase, when in fact the prize or a reasonable equivalent are not offered, or pretending to offer a product “free of

charge,” while in fact the purchase requires making phone calls at premium rates or other extra payments.

Hidden advertising is a practice of advertising that does not acknowledge the identity of the advertiser. It is used in customer reviews to give a false impression of the impartiality of the reviews, while in reality they are likely to be biased towards the trader who sponsors the advertising. Hidden advertising is especially viral for online price comparisons websites (PCWs), a tool used increasingly by EU online shoppers.

With bait and switch selling methods, suppliers first lure consumers to their business by making an advantageous offer of a product with the intention of selling other products. When, as a result of the advertising, consumers approach the trader, the latter either defers the order for the advertised product, shows a defective sample of it, or simply refuses to show the advertised item to the consumer – all while offering instead other, typically less advantageous, products.

Pressure and aggressive selling tactics either induce a false sense of urgency, or exert psychological harassment and coercion on consumers. Examples include making false claims that a product is available for a limited period of time made with the intent to elicit an immediate decision to purchase, making persistent and unsolicited offers by phone or email, harassing the consumer with unreasonable requests when he attempt to exercise his rights, and even creating a threatening atmosphere in order to induce the consumer to sign a contract.

Consumer scams entail outright fraud to the extent they deceive consumers into entering phantom transactions. Examples include pyramid schemes, lottery scams, internet auction frauds, phishing and pharming for identity theft, and phone number scams. Pyramid schemes claim to offer the possibility of a significant return (such as an expensive free gift) to consumers who pay a small entry fee. After paying the fee, the consumer enters a list with the promise he will receive the gift after convincing a given number of new recruits to be enlisted. The scheme usually collapses due to the failure of late comers to keep finding new recruits to the scheme. In lottery scams, consumers receive surprise phone calls announcing them they had won a significant lottery prize. In order to collect the prize, however, first they must pay a given amount of money. Consumers who are deceived by these scams learn eventually that there is no prize. With internet

auction frauds, consumers either discover that the product they purchased does not comply with the characteristics advertised, or they don't even receive any product after making the payment. With identity theft, consumers receive an email with links and update instructions for mock websites that allow the embezzlers to appropriate his identity details, including address, payment card details, and passwords. Finally, phone number scams entice consumers into calling premium rate phone numbers.

In the EU context, misleading advertising has been addressed first by Directive 84/450/EEC (Misleading Advertising Directive). The Directive instructs Member States to empower national courts to outlaw or prohibit misleading practices in advertising, leaving way for more stringent national provisions if Members States so desire. The Misleading Advertising Directive was amended by Directive 97/55/EC (Comparative Advertising Directive) so as to include comparative advertising. The Comparative Advertising Directive establishes conditions under which comparative advertising is permitted, as well as requirements on information items that should be provided with any such advertising. Conditions for comparative advertising address issues such as the accuracy of information included in the advertisement, the comparability of products advertised, and the correct representation of trademarks or trade names. Suppliers are required to offer unequivocal information on prices, availability of goods, period of validity of the offer, and any special conditions that may apply. The Directive achieves minimum harmonization of these rules across Member States.

A general prohibition of unfair commercial practices is introduced by Directive 2005/29/EC (Unfair Commercial Practices Directive), which achieves full harmonization at the EU level in all sectors, with the exception of financial services and immovable property. This Directive amends the previous two Directives on advertising discussed above, and it is broader in scope as it covers all business-to-consumer practices, including advertising, selling, and after-sale practices. The Directive focuses on consumers, and it does not cover commercial practices that harm competitors' interests but have negligible effects on consumers.

The Unfair Commercial Practices Directive establishes a general ban on misleading and aggressive commercial practices. Misleading commercial practices are divided into misleading

commercial actions, such as false claims and deceptive advertising, and misleading omissions of information relevant for consumers. Aggressive practices are defined in terms of harassment, coercion, including the use of physical force, and undue influence exerted on consumers with the objective of conditioning his decision to purchase. The Directive provides a black list of prohibited misleading and aggressive commercial practices, list which can be updated only by amending the Directive.

The EC report on the implementation of the Unfair Commercial Practices Directive (COM (2013) 139 final) indicates that there were significant delays in the transposition of the Directive across Member State. Compared to the initial term of 12 June 2007 provided for in the Directive, the majority of national provisions were implemented during years 2008 and 2009. The last transposition took place in late 2009. These delays were due to the fact that full harmonization entailed a comprehensive screening of national legislation related to unfair commercial practices in all Member States. The report also signals that progress with the application of the Directive provisions which aim at protecting vulnerable consumers has been rather slow.

According to the COM (2013) 139 final report, the Unfair Commercial Practices Directive has been used extensively to sanction unfair trading behaviour, especially in the online environment. In 2007, for example, national authorities organized a coordinated sweep of websites for airline tickets. Organized under the framework of the Consumer Protection Cooperation Regulation, the Sweep inspected 386 websites, and found that almost 40% included irregularities such as misleading information on prices and inaccurate presentation of contract terms. One year later, in 2008, EU national authorities organized another coordinated sweep of more than 500 websites selling digital products (ringtones, wallpapers and mobile phone services) specifically addressed to minors. Around 60% of these websites were found in breach of EU consumer law. Main problems included false claims of offering products free of charge, ambiguous information on prices, or omission of information relevant for consumers.

More generally, the commercial practices most frequently reported in EU Member States occur mainly in relation to off-premises and distance sales in the leisure industry, but also for consumer goods such as electronic, health and food products. Most used provisions from the list of unfair

commercial practices of the Directive include: bait and switch advertising, the presentation of a legal guarantee as a competitive advantage of the business, misleading offers of “free of charge” products, the promotion of miracle products and false cures, and schemes creating the illusion that the consumer has already won a prize. Yet another example of misleading advertising increasingly employed by suppliers is the use of ambiguous environmental claims, especially for products such as energy, cosmetics, cars and detergents.

1.2.4 Consumer detriment and mechanisms of redress

Consumer detriment is the loss incurred by the consumer when making sub-optimal purchases. Consumers may experience detriment when they realize that the products/ services purchased are not fit for purpose, that the prices they paid are unfair, or that they have been treated unfairly by the trader. Direct losses include consumers’ efforts (in terms of time, money and emotional involvement) to seek redress, and even the amount paid for the transaction, in case of no redress. In case of unsuccessful attempts to seek redress, indirect losses include damages to consumers’ confidence in the trader with possibly cascading adverse impacts on the trust of consumers in the trading environment.

Vulnerable consumers are particularly exposed to consumer detriment due either to their impaired ability to recognize the detriment in good time, or due to their more limited possibilities to seek redress. As mentioned above, vulnerabilities of consumers are defined primarily in terms of age (elderly or very young), mental or physical infirmity, or credulity. Further individual characteristics that make consumers more vulnerable to unfair trading practices include: unemployment and a precarious financial situation, a high degree of indebtedness, low educational levels, or being member of an ethnic minority (UK OFT 1997).

Consumer detriment can be addressed by seeking remedies or redress. The likelihood that a consumer will seek redress successfully, however, rises with a number of factors. First, the decision to seek redress depends on the magnitude of the detriment experienced, relative to the costs the consumer needs to incur with the redress procedures. Second, confidence of success is enhanced by knowledge of consumer rights. If the consumer knows his rights applicable to the specific situation, or if he knows where to find relevant information, he will be more confident in

his decision to pursue the trader. And third, chances of success are greatly enhanced by the availability of consumer support with respect to the exercise of consumer rights against suppliers.

Typical possibilities of redress include appealing to the trader to amend the situation to the consumer's satisfaction or, if no consensus is achieved directly with the trader, going to and Alternative Dispute Resolution (ADR) entity or, eventually, to the Court. Reaching an amiable solution with the trader is the first-best option, as it is efficient in terms of costs and outcomes for both parties. This solution is easily reached in situations where, given the legitimacy of consumer's complaint, the detriment is low enough such that the trader prefers to solve the matter directly and avoid further legal hassles. If the trader does not cooperate, however, taking him to court is a solution of last resort since it usually entails high costs and long waiting periods for a legal judgment. Furthermore, with intermediate levels of detriment, this alternative is inefficient in that it entails asymmetric incentives for an amiable settlement between the trader and the consumer. The trader has weaker incentives to agree with an amiable outcome, given that he knows that the consumer is less willing to incur the significant costs required to initiate legal procedures.

Increasingly, consumers have the possibility to resort to an entity for alternative dispute resolution (ADR), which facilitate resolutions of conflicts between consumers and suppliers without having to go to court. ADR entities are efficient in that they offer quick out-of-court procedures for settling disputes, often at no or negligible cost to the consumer. The report of Civic Consulting (2009), for example, indicates that the consumers' average cost of seeking redress through ADR entities in EU countries is around 50 euro, while the average duration for reaching a final outcome is 90 days.

ADR entities can be private or public, and national or regional. Private ADR entities are established and financed by the industry, and participation in these schemes is most of the time voluntary. When established by trade associations, however, participation in private ADRs may be required as a pre-condition of membership in the association. Public ADR entities, on the other hand, can be based on cooperation between the public sector and the industry, and they can

be financed fully or partially through public resources. Participation can be voluntary or mandated by law. With respect to geographical coverage, in most EU countries ADR entities are established at the national level, with the exception of Germany, Italy and Spain where these mechanisms are primarily regional. Even in those countries, however, the private ADRs established by industry usually operate at the national level.

In terms of coverage of economic sectors, some ADR entities are specialized to deal with disputes in a specific economic sector (sectoral entities), such as insurance services or tourism, while others can deal with disputes across several sectors (cross-sectoral entities). The report of Civic Consulting (2009) indicates that there are sectoral gaps in ADR entities across EU countries, and that these mechanisms tend to be better developed in sectors such as financial services, telecommunications, and travel and tourism.

According to the same report, ADR entities in the EU countries typically rely on a third party (an ombudsman or a board) to help reach a solution in a dispute between a consumer and a trader, and they facilitate four types of outcomes: 1) mediation with the aim of a consensual agreement, 2) non-mandatory recommendations, 2) decisions binding on the trader, but not on the consumer, and 3) decisions binding on both the trader and the consumer. These outcomes often rely on the practical aspects of the specific case, and are supported by written evidence provided by the complaining consumer and, possibly, by the trader. Compliance with the ADR decisions is supported either through laws, if trader participation in ADR entities is mandated by law, imposed for its members by the business association which supports the ADR entity, or achieved through naming and shaming systems implemented by the entities themselves.

The research of ADR entities in EU countries reported in Civic Consulting (2009) indicates also that barriers for the use of ADR entities across the EU still remain. For consumers, these barriers include insufficient development of ADR entities, especially in the new Member States, insufficient geographical and sectoral coverage of ADR entities within the country, lack of awareness of consumers with respect to the existence and procedures of these out-of-court mechanisms, language barriers for cross-border ADR procedures, non-compliance of suppliers with non-binding decisions, and even the refusal of suppliers to enter an ADR procedure. For

suppliers, on the other hand, main obstacles include insufficient ADR coverage in some sectors, and limited possibilities for suppliers to initiate ADR procedures.

Principles for ADR entities were first established at the EU level by two EC Recommendations: Commission Recommendation 98/257/EC and Commission Recommendation 2001/310/EC. The first EU initiative, issued in 1998, provides general EU principles for the establishment of out-of-court mechanisms for the resolution of conflicts between consumers and suppliers, with a focus on ADR entities that issue non-binding recommendations and binding decisions. These principles include: independence of the ADR entity, transparency of ADR procedures, balanced treatment for both sides of the conflict (adversarial principle), effectiveness of the service in terms of cost, time and access, legality, liberty to not enter procedures with binding outcomes, and the right of representation by a third party at all stages of the ADR procedure. The second EU initiative, issued in 2001, complements the first one by establishing general principles for ADR entities that mediate consensual agreements between consumers and suppliers. These principles include: impartiality of the ADR entity, transparency, effectiveness of the service in terms of cost, time and access, and fairness of treatment of both parties.

Shortcomings in the functioning of the ADR entities in terms of geographical and sectoral coverage, as well as the limited awareness of consumers with respect to the possibility to tackle disputes with retailers through ADR entities have been recognized at the EC level and, as a result, have prompted the adoption of new legislation recently. The Directive 2013/11/EU on ADR entities in Member States provides the legal basis for sustained efforts in all EU countries to foster the development of ADR services throughout the internal market. According to the Directive Member States have the obligation to provide full ADR coverage for the traders established in their territory. Member States can fulfil this obligation by establishing, for example, a residual ADR entity or by using ADR entities established in another EU Member State. The main principles that will apply to ADR entities across Member States include transparency, effectiveness, fairness, liberty and legality. Traders that commit or are obliged to use ADR will need to inform consumers about ADR while all traders will need to inform consumers about ADR in case they cannot solve a dispute bilaterally with them. The Directive on consumer ADR establishes also that, every two years, Member States will collect data on the

functioning of ADR including information such as: the type and volume of complaints received, the average time taken to solve the disputes tackled, details on any systematic and typical problem that occur frequently and lead to disputes between consumer and traders, as well as the assessment of the effectiveness of ADR procedures. The Member States are to implement the provisions of the Directive by 9 July 2015, and will communicate the list of ADR services available at the national level by 9 January 2016.

Another recent legislative measure aimed at increasing the confidence of consumers in online and cross-border transactions is the Regulation 524/2013 on online dispute resolution (ODR) for consumer disputes. Interlinked and complementary to the Directive on consumer ADR discussed above, the Regulation on consumer ODR applies to out-of-court resolution of disputes between consumers and traders established in the EU, arising from online purchases. The objective of the Regulation on consumer ODR is to establish an online platform where EU consumers and traders can submit complaints that are to be tackled by competent ADR entities. The ODR platform will rely on the national ADR and will be directly accessible but also available through other relevant websites, such as the "Your Europe" portal. If permitted also by the legislation of the Member States, the Regulation on consumer ODR provides for the right of retailers to initiate complaints against consumers and it establishes the obligation of retailers engaging in online sales or service contracts to provide the link to the EU ODR platform on their websites. The Commission will publish an annual report on the functioning of the ODR platform. The Regulation shall apply fully by 9 January 2016. The first EC report to the European Parliament and the Council on the application of the ODR Regulation is due by 9 July 2018.

For cross-border transactions, the European Consumer Centres (ECCs) have been established in order to address consumer problems across EU countries. The network of European Consumer Centres consists of entities established in all EU Member States, Norway and Iceland with the objective of assisting the European consumers with respect to information on consumer rights and support for amiable resolution of cross-border disputes between consumers and retailers. Also for cross-border transactions, a fast track procedure that is designed to simplify the resolution of disputes in courts is the European Small Claims Procedure. This procedure has been introduced by the EC Regulation No 861/2007, it is in force since January 2009, it applies

to all Member States but Denmark, and it can be used by consumers or businesses with claims that do not exceed 2000 euro.

In principle, the objective with the introduction of European Small Claims Procedure was to provide a more efficient alternative for solving cross-border commercial disputes of relatively small value in the national courts. The recent consumer survey Special Eurobarometer 395 on the European Small Claims Procedure carried out in 2012 indicates that the procedure is little known and used by the European consumers. The survey indicates that, of all consumers who experienced at least one shopping problem during the previous year, for 87% of them the claims were less than 2000 euro – therefore eligible for a small claims procedure. The survey further indicates that only 19% of consumers are aware of a small claims procedure in their country, and 12% of them have heard of the European Small Claims Procedure. With respect to the use of such procedures, 3% of consumers have used a national small claims procedure, and 1% of them have used the European Small Claims Procedure. The European Small Claims Procedure is currently under revision (COM (2013) 794 final).

1.2.5 Conclusions

In this chapter we provide an overview of the legislative measures for consumer protection that apply generally across the internal market. The objective of this exercise is to identify the key concepts of consumer conditions that are legislated in a unifying framework across Member States. These concepts include the following: 1) terms for general consumer sales, such as the indication of unit prices, legal guarantees, unfair terms in consumer contracts, adequate information on the terms of trade, and conditions for delivery and payments, 2) terms for off-premises and distance contracts, such as cooling off periods and rights of withdrawal, 3) unfair commercial practices, including misleading, deceptive, or fraudulent advertising and selling practices, and 4) consumer detriment and mechanisms of redress. For each concept, where applicable, we provide brief discussions of the corresponding legislative provisions at the EU level, and of their implementation in the Member States to date. These concepts constitute the conceptual foundation for the revision of the EC Consumer Conditions Scoreboard in chapter 1.5.

1.3 Statistical audit of the 9th edition of the consumer conditions index

Fiammetta Rossetti and Vincent Van Roy

This chapter presents the most insightful results provided by the audit exercise on the 9th edition of the Consumer Conditions Index. We provide evidence about the correlation structure of the index framework, and we perform a robustness assessment of the methodologies that were adopted to construct it.

1.3.1 Introduction

In July 2013 the Consumers Directorate of DG Justice and Consumers released the 9th edition of the Consumer Conditions Scoreboard which is a tool for evidence-based consumer policy. The objective of the scoreboard is monitoring the consumer conditions and the progress toward integration of the single market. Specifically, it ‘shows how the single market is performing for EU consumers and warns of potential problems’ (European Commission, 2013, p. 3). National assessments of the consumer and retailer conditions are analysed through the Consumer Conditions Index (CCI), which is a summary measure of the quality of the consumer environment as pictured by the results of EU-wide surveys of consumers and retailers (i.e. Eurobarometer 358 and 359, conducted in 2012).⁴

The CCI uses data on 12 quantitative indicators and it accounts for five main pillars: trust, enforcement, complaints, redress and safety. Candidate indicators are selected for their relevance to each specific consumer condition pillar, on the basis of a literature review, expert opinion, country coverage, and timeliness. The index attempts at gauging: 1) the sentiment of consumers’ trust toward several market agents (i.e. public authorities, retailers, consumer organisations, and existing consumer protection measures); 2) the presence of illicit commercial practices (i.e. as experienced by consumers); 3) the consumers’ propensity to complain; 4) the perceived ease of redress; and 5) the perceived safety of non-food products on the market.

⁴ The Eurobarometer 358 and 359 are EU-wide surveys (also referred to as ‘EC surveys on consumers and retailers’ through the text) collecting data on consumers and retailers trust in legislation, their experiences with problems, enforcement, compliance and redress (see previous chapter for a more detailed overview).

The Unit of Econometrics and Applied Statistics of the JRC audited the statistical soundness of the 9th edition of the CCI. We provide a detailed audit of the index based on an in-house quality control that ensures the transparency of the methodology and the reliability of results (Paruolo et al., 2013; Saisana et al., 2011; Saisana et al., 2005; Saisana and Saltelli, 2011). This quality control process follows different steps to appraise the coherence of the index, including an exploration of the underlying framework, statistical tests about data, and an evaluation of the index coherence through a set of correlation-based analyses and robustness controls about normalisation possibilities, weights and aggregation methods.

We find comforting evidence about the statistical properties of the present edition of the CCI. Already at the level of summary statistics we observe that there are no problematic indicators - in terms of skewness and kurtosis - that could bias the results. In addition, no particular problems arise from the correlation analysis.

The principal component analysis on all indicators reveals the existence of three different pillars. Therefore, a reflection on the frame could be worthwhile, especially about the appropriateness of including the third and fourth dimensions of Trust, and about the reduction of the number of pillars from five to three.

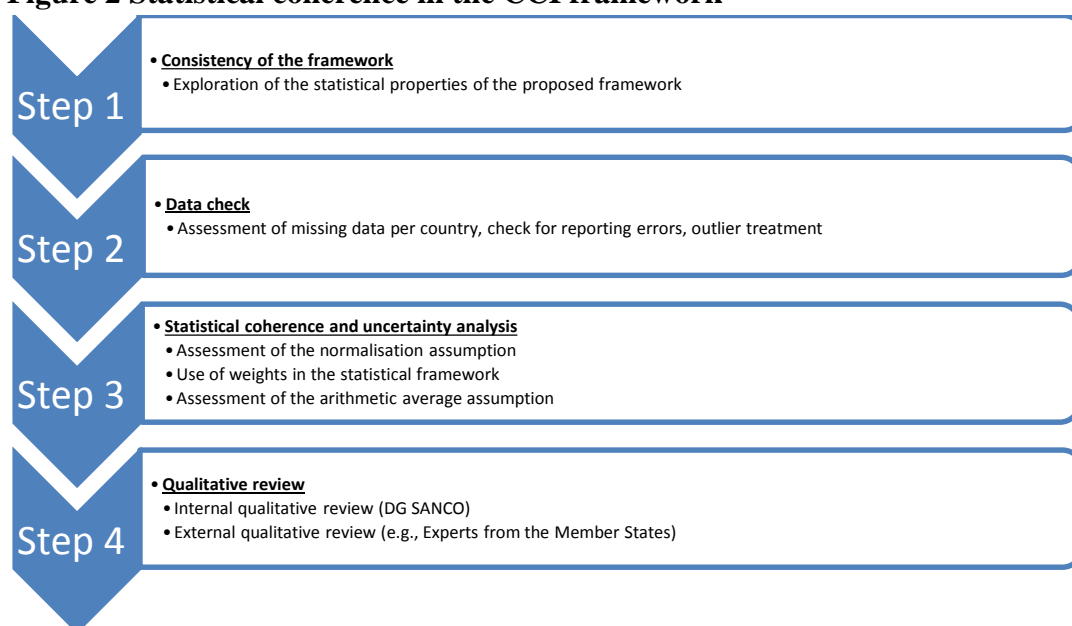
Uncertainty analysis confirms that country ranks remain relatively stable across the various simulations. We find that all countries shift less than 3 positions compared to the simulated median rank (40% of the countries remain even stable). Estonia is the only country recording a difference of 4 positions. Sensitivity analysis reveals that the aggregation method has the highest influence on the rankings, although its impact remains modest. When geometric aggregation is assumed, 96% of the countries record an absolute difference in ranking of maximum 2 positions, except for Spain (gaining 3 positions) Romania (losing 4 positions), and Estonia (gaining 7 positions). Also impact of options related to weighting the indicators and normalising the data remains limited. With respect to the latter, the decision not to normalise the indicators is justified from a statistical point of view.

We proceed as follows. In chapter 1.3.2 we explore the statistical coherence of the CCI framework. In chapter 1.3.3 we present results about the uncertainty and sensitivity analysis on modelling alternatives for indicators' weights, data normalisation, and aggregation methods. In chapter 1.3.4 we compare the CCI with economic indicators on economic performance and market competitiveness. The final chapter draws conclusions on the statistical soundness of the CCI.

1.3.2 Statistical coherence of the CCI framework

The appraisal of the coherence of an index follows four steps (see Figure 2): 1) the consideration of the underlying framework with respect to its statistical properties; 2) the empirical checks about data (e.g., availability of indicators/variables, missing values, existence of outliers); 3) the evaluation of the statistical coherence through a set of robustness checks about normalisation possibilities, weights and aggregation methods; 4) the last step is a qualitative confrontation with the expert bodies in order to get suggestions and reviews about the decisions undertaken in the previous stages of analysis (Saisana, 2011). Step four exceeds the scope of this report, hence we only elaborate on the first three.

Figure 2 Statistical coherence in the CCI framework



1.3.2.1 Step 1: Consistency of the framework

The quality of the consumer environment is summarised in the Scoreboard through the CCI which is a composite index based on the results of EC consumers' and retailers' surveys. The index accounts for 12 indicators, equally weighted and expressed in percentages (Table 1). Indicators are grouped in five pillars: consumer trust; economic enforcement; consumer complaints; redress; product safety. This implies that indicators on trust get a higher weight (4 against 2 for the other pillars).

In order to construct the CCI, all variables should point in the same direction. Hence, all questions included in the survey were interpreted in such a way that variables with higher percentages are more favourable.

Table 1 Definition of indicators

Indicator	Based on EB	Definition
Trust1	EB 358 - Q1.3	Percentage of consumers who feel adequately protected by existing measures
Trust2	EB 358 - Q1.2	Percentage of consumers who Trust public authorities to protect their rights
Trust3	EB 358 - Q1.4	Percentage of consumers who Trust sellers/providers to respect their rights as a consumer
Trust4	EB 358 - Q1.1	Percentage of consumers who Trust consumer organisations to protect their rights as a consumer
Enforcement1	EB 358 - Q19.1	Percentage of consumers who did not come across misleading and deceptive advertisements/offers
Enforcement2	EB 358 - Q19.3	Percentage of consumers who did not come across fraudulent advertisements/offers
Complaints1	EB 358 - Q10b	Percentage of consumers who took action when they encountered problems
Complaints2	EB 358 - Q12.1	Percentage of consumers who were satisfied with complaint handling by retailer/provider
Redress1	EB 358 - Q1.5	Percentage of consumers who find it easy to resolve disputes with sellers/providers through ADR
Redress2	EB 358 - Q1.6	Percentage of consumers who find it easy to resolve disputes with sellers/providers through courts
Safety1	EB 358 - Q2	Percentage of consumers who don't think that a significant number of products are unsafe
Safety2	EB 359 - Q11	Percentage of retailers who don't think that a significant number of products are unsafe

Source: European Commission, 2013 and Eurobarometer (EB) 358 and 359.

1.3.2.2 Step 2: Data checks

The CCI database contains 30 countries (EU-28, Norway, and Iceland), and it does not contain any missing data, outliers or coding errors (Table 2).

In a first exploration of the data, we reflect on the extent to which indicators could bias the final results of the index, namely when indicators show at the same time a skewness greater than 2 and a kurtosis greater than 3.5 (both in absolute value). Two indicators on redress and safety report

critical values for the kurtosis, however – based on this analysis – none of the indicators can significantly bias the index.

Table 2 Summary statistics

Indicator	obs	mean	p50	min	max	sd	p25	p75	skewness	kurtosis
Trust1	30	52.93	53.00	18.00	76.00	15.41	42.00	68.00	-0.33	2.33
Trust2	30	58.97	58.50	31.00	83.00	15.81	48.00	73.00	-0.14	1.91
Trust3	30	58.43	59.00	37.00	77.00	10.78	52.00	64.00	-0.19	2.43
Trust4	30	71.37	73.50	54.00	90.00	11.29	59.00	80.00	-0.04	1.64
Enforcement1	30	50.13	51.00	30.00	66.00	9.57	45.00	58.00	-0.50	2.45
Enforcement2	30	65.87	65.50	50.00	81.00	8.26	59.00	71.00	0.00	2.15
Complaints1	30	78.93	84.00	61.00	92.00	10.66	69.00	88.00	-0.31	1.51
Complaints2	30	63.53	64.50	37.00	78.00	10.18	55.00	72.00	-0.53	2.73
Redress1	30	44.10	45.00	24.00	70.00	9.18	39.00	50.00	0.33	3.89 *
Redress2	30	34.90	34.50	13.00	50.00	8.86	28.00	42.00	-0.21	2.40
Safety1	30	68.70	66.50	44.00	90.00	10.59	63.00	75.00	-0.04	3.13
Safety2	30	76.90	77.50	44.00	98.00	11.45	69.00	86.00	-0.68	3.58 *

Note: Values of kurtosis $>|3.5|$ are in bold with an asterisk. No skeness values are found problematic (i.e. $>|2|$).

1.3.2.3 Step 3: Statistical coherence - principal components analysis

In order to identify the statistical soundness of the underlying indicators of the various pillars of the CCI we perform a preliminary analysis of correlations among indicators and their respective pillar averages (Table 3 and Table 4).

With correlation analysis we aim at detecting potential cases of strong collinearity (correlations greater than 0.92)⁵, indicators behaving as noise (correlations not statistically significant at 99%), or correlations pointing to the opposite direction with respect to their dimension (negative correlations).

The presence of pairs of highly correlated indicators can lead to double counting. In such cases, it may be advisable to treat these indicators as one by assigning them a 0.5 weight each. Some indicators may behave as noise in the proposed framework, which means that they have very low – or random correlations – with their pillar. Very low or random associations between indicators

⁵ In the literature, the threshold of 0.92 is often used to represent high collinearity (Claessens, 1995, p. 10).

and their pillar average should not be taken to mean that these indicators do not describe important issues on consumer conditions. However, these random associations imply that even if some countries improve their scores on ‘noisy’ indicators, this improvement will not lead to an enhancement in their respective pillar or in their index score. Some authors (e.g. Booysen, 2002) recommend that a weak correlation between a sub-component and an index should result in the exclusion of the respective component from the framework. Finally, it is generally advisable to avoid negative correlations within an index framework. In such cases, it is useful to explore whether this is due to a trade-off between the indicator and its pillar average or to a coding error. Table 3 shows that the indicators adequately correlate among each other within their respective pillars (in grey) without issues related to either negative or too low/too high correlations.

Table 3 Correlation matrix of indicators

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
[1] Trust1	1.00											
[2] Trust2	0.82	1.00										
[3] Trust3	0.82	0.58	1.00									
[4] Trust4	0.83	0.80	0.63	1.00								
[5] Enforcement1	0.51	0.40	0.55	0.54	1.00							
[6] Enforcement2	0.00	0.03	0.17	-0.06	0.47	1.00						
[7] Complaints1	0.56	0.37	0.41	0.50	0.22	-0.12	1.00					
[8] Complaints2	0.35	0.03	0.31	0.06	0.01	-0.11	0.45	1.00				
[9] Redress1	0.48	0.56	0.44	0.45	0.21	-0.12	0.23	-0.01	1.00			
[10] Redress2	0.34	0.49	0.21	0.46	0.28	-0.28	0.00	-0.23	0.68	1.00		
[11] Safety1	0.73	0.65	0.60	0.68	0.24	-0.04	0.52	0.23	0.44	0.23	1.00	
[12] Safety2	0.66	0.47	0.53	0.51	0.34	0.16	0.46	0.39	0.13	-0.14	0.74	1.00

Note: All correlations within pillars are significant at 1%. Correlations from the same pillar are highlighted in grey.

Table 4 presents a breakdown by pillar showing in addition the correlation of indicators with their pillar averages. The framework of the CCI seems quite balanced since all indicators have similar contribution to their respective pillar. However, it is important to notice that these five pillars are mostly grounded on conceptual considerations rather than also on their statistical soundness.

Table 4 Correlation matrix of indicators with their pillars

Pillar	Indicators	Index	Trust	Enforcement	Complaints	Redress	Safety
Trust	Trust1	0.95	0.96	0.32	0.54	0.45	0.74
	Trust2	0.83	0.91	0.26	0.24	0.57	0.60
	Trust3	0.82	0.82	0.44	0.42	0.36	0.61
	Trust4	0.85	0.90	0.31	0.33	0.50	0.63
Enforcement	Enforcement1	0.61	0.54	0.88	0.14	0.26	0.31
	Enforcement2	0.12	0.04	0.84	-0.14	-0.21	0.07
Complaints	Complaints1	0.61	0.51	0.07	0.86	0.13	0.52
	Complaints2	0.33	0.21	-0.05	0.85	-0.13	0.33
Redress	Redress1	0.58	0.54	0.07	0.14	0.92	0.29
	Redress2	0.39	0.42	0.02	-0.13	0.91	0.04
Safety	Safety1	0.80	0.74	0.13	0.44	0.36	0.93
	Safety2	0.71	0.60	0.30	0.50	0.00	0.94

Note: Correlations from the same pillar are highlighted in grey.

The analysis of the correlation structure within and across pillars in Table 4 confirms the reasonable expectation that indicators are more correlated within their own pillar than with other pillars, and correlations within a pillar are significant and positive. This evidence has two implications: from a statistical point: there is no need to reallocate indicators into different pillars, and no trade-off is present in this framework since all correlations are significant and positive.

From a statistical perspective we employ the principal component analysis (PCA)⁶ in order to grasp insights on the appropriate number of pillars. We perform PCA either on all the indicators (Table 5), and by pillar (see appendix). The usefulness of PCA in this context can be easily explained as follows: each pillar in the CCI is designed to describe a particular aspect of the latent phenomenon to measure (i.e. consumer conditions). Since these aspects are not directly observable, they are measured by a set of observable indicators which are - by definition - related to the aspect they are supposed to describe and, consequently, to each other. Ideally, all indicators conceptually grouped into a pillar, should be described by a single principal component.

⁶ PCA allows replacing a large number of variables with much fewer ‘artificial’ variables that effectively represent the same data. These artificial variables are called principal components and are linear combinations of the underlying original variables.

In the case of the CCI the first three principal components (out of the total 12) contributed 75% of variance of the data, therefore focusing on them may allow to understand key drivers of the index. Among the three different components – or latent dimensions – the first one is loaded by the ‘percentage of consumers who feel adequately protected by existing measures’, the ‘percentage of consumers who took action when they encountered problems’, the ‘percentage of consumers who were satisfied with complaint handling by retailer/provider’, the ‘percentage of consumers who don't think that a significant number of products are unsafe’, and the ‘percentage of retailers who don't think that a significant number of products are unsafe’ (i.e. trust1, complaints1, complaints2, safety1 and safety2). The second latent dimension is loaded by the ‘percentage of consumers who Trust public authorities to protect their rights’, the ‘percentage of consumers who find it easy to resolve disputes with sellers/providers through ADR’, and the ‘percentage of consumers who find it easy to resolve disputes with sellers/providers through courts’ (i.e. trust2, redress1 and redress2). Finally the last latent dimension is loaded by the two indicators on enforcement. The PCA by pillar is instead characterised by one principal latent component for each pillar (see appendix), and it does not reveal particular problems.

The principal component analysis suggests that – from a statistical perspective – the CCI of the 9th edition of the consumer scoreboard should be composed of three dimensions rather than five. A similar exercise will have to be performed for the CCI of the 10th edition of the consumer condition scoreboard (that will be released in 2015) as to match the conceptual and the statistical coherence.

Table 5 Principal component analysis for all indicators

	Eigenvalue	Variance explained %	Indicators	PC1	PC2	PC3
PC1	5.52	46.00	Percentage of consumers who feel adequately protected by existing measures	0.72	0.57	0.26
PC2	1.96	16.32	Percentage of consumers who Trust public authorities to protect their rights	0.43	0.73	0.24
PC3	1.54	12.82	Percentage of consumers who Trust sellers/providers to respect their rights as a consumer	0.60	0.42	0.41
PC4	0.76	6.37	Percentage of consumers who Trust consumer organisations to protect their rights as a consumer	0.51	0.69	0.25
PC5	0.60	5.01	Percentage of consumers who did not come across misleading and deceptive advertisements/offers	0.18	0.33	0.78
PC6	0.48	4.04	Percentage of consumers who did not come across fraudulent advertisements/offers	-0.08	-0.25	0.88
PC7	0.35	2.89	Percentage of consumers who took action when they encountered problems	0.76	0.15	-0.08
PC8	0.33	2.74	Percentage of consumers who were satisfied with complaint handling by retailer/provider	0.72	-0.26	-0.19
PC9	0.19	1.57	Percentage of consumers who find it easy to resolve disputes with sellers/providers through ADR	0.12	0.81	-0.05
PC10	0.13	1.06	Percentage of consumers who find it easy to resolve disputes with sellers/providers through courts	-0.19	0.90	-0.09
PC11	0.09	0.75	Percentage of consumers who don't think that a significant number of products are unsafe	0.71	0.45	0.10
PC12	0.05	0.43	Percentage of retailers who don't think that a significant number of products are unsafe	0.81	0.05	0.30
Expl.Var				3.69	3.44	1.89
Prp.Totl				0.31	0.29	0.16

Note: The factor loadings are rotated with the varimax transformation.

From the correlation analysis between the CCI and its pillars (Table 6) we observe that the pillars of Trust and Safety are highly correlated (i.e. 0.96 and 0.81, respectively) with the index, while the other pillars are less correlated. The pillars of Trust and Safety drive – more than the others – the high variance, hence it has more impact on the CCI. This pronounced correlation between Trust and the index may be likely the consequence of Trust having twice the number of indicators than the other pillars, and being automatically weighted twice the others in the index. As for the high correlation of Safety and the index, it is also probably driven by the high correlation between Safety and Trust (Table 4.).

Table 6 Correlations between the CCI and its pillars

Pillar	CCI	
	ρ	ρ^2
Trust	0.96	0.92
Enforcement	0.44	0.19
Complaints	0.56	0.31
Redress	0.53	0.28
Safety	0.81	0.65

These unbalanced values suggest that the information of the index is primarily driven by one or two pillars, while three pillars out of five may be of little added value to the index. As can be

observed from Table 4, the high correlation of the pillar Trust is mainly influenced by the first indicator of this pillar with the CCI (i.e. 0.95). The other indicators of the trust pillar correlate with the CCI around 0.8.

One way to highlight this bias of the CCI towards the issue of trust is to pinpoint the differences in rankings that emerge from a comparison between the CCI and each of the five pillars (Table 7). From the percentage of countries that shift ranking categories across pillars, we get an idea of how countries' rank moves when considering the pillars instead of the index. The table reveals that the ranking of the CCI is closely related to the ranking based on the pillar of Trust. This renders the information of the CCI too close to the one carried by its first pillar, to the point that the CCI might mainly reflect trust issues rather than really combining the heterogeneity of the five dimensions as a whole.

Table 7 Distribution of differences between pillars and CCI rankings

Rank shifts	Trust	Enforcement	Complaints	Redress	Safety
< 5	0.94	0.33	0.40	0.60	0.64
5 to 9	0.03	0.40	0.33	0.23	0.23
> 9	0.03	0.27	0.27	0.17	0.13

1.3.3 Impact of modelling assumptions on the CCI results

The construction of a composite indicator to rank countries implies a set of choices related to the normalisation procedure, the assignation of weights to the indicators, and the aggregation method. Saisana et al. (2005) developed a robustness assessment to evaluate the statistical soundness of composite indicators. This assessment consists of uncertainty and sensitivity analyses. In the uncertainty analysis we analyse the predicted imprecision of country rankings that is due to the overall uncertainty in modelling assumptions. Sensitivity analysis is eventually used to quantify how changes in particular modelling assumptions alter the value of the country rankings. In order to evaluate if weighting the indicators would affect scores and rankings, we run 1000 Monte Carlo simulations performed on different weights for the twelve indicators. These weights are randomly sampled from uniform continuous distributions centred on the reference value of 1/12 (i.e. the equal weights used in the CCI). In order to have a valid interval,

we allow the weights to vary up to 60% above and below the reference weight, hence limit values for the indicator weights range between 3 and 13 percent.

As for normalisation, for the CCI the developing team opted for not normalising the raw data given the argument that this is common practice when data are expressed in percentages. Nevertheless this may lead to a biased composite indicator, with a small bias if the indicators have similar variances, and with a large bias toward the indicators with the smallest variance if the indicators have very different variances. In the robustness analyses we check for this potential bias by performing simulations with data normalised by the min-max transformation with a range from 1 to 100.

Finally, concerning the aggregation formula, the CCI is constructed by arithmetic averages. However, arithmetic averages have a fully compensatory nature, since a high strength on few indicators can compensate with a weakness on many indicators (Munda, 2008). As such, the arithmetic average does not penalise the difference in values between indicators. An alternative method of aggregation is the geometric average which is instead a partially compensatory approach that rewards countries with balanced profiles, therefore it motivates them to improve in the dimensions in which they perform poorly and not just in any dimension. We explore the potential effects of geometric average to test the uncertainty of the index due to the aggregation method.

In total, four models are tested (i.e. combining non-normalisation versus normalisation, and arithmetic versus geometric average) with 1,000 simulations each (i.e. random weights - within reasonable bounds - versus fixed weights), resulting in a total of 4,000 simulations for the CCI (see Table 8 for a summary of the uncertainties considered in the CCI).

Table 8 Uncertainty analysis for the CCI: weights, normalisation, aggregation

I. Uncertainty in the normalisation		
<i>Reference</i>	<i>Alternative</i>	
no normalisation	normalisation	
II. Uncertainty in the aggregation formula		
<i>Reference</i>	<i>Alternative</i>	
arithmetic average	geometric average	
III. Uncertainty in the weights		
Variable	Reference value for the weight	Distribution assigned for robustness analysis
Trust1	1/12	U[0.03,0.13]
Trust2	1/12	U[0.03,0.13]
Trust3	1/12	U[0.03,0.13]
Trust4	1/12	U[0.03,0.13]
Enforcement1	1/12	U[0.03,0.13]
Enforcement2	1/12	U[0.03,0.13]
Complaints1	1/12	U[0.03,0.13]
Complaints2	1/12	U[0.03,0.13]
Redress1	1/12	U[0.03,0.13]
Redress2	1/12	U[0.03,0.13]
Safety1	1/12	U[0.03,0.13]
Safety2	1/12	U[0.03,0.13]

1.3.3.1 Uncertainty analysis results

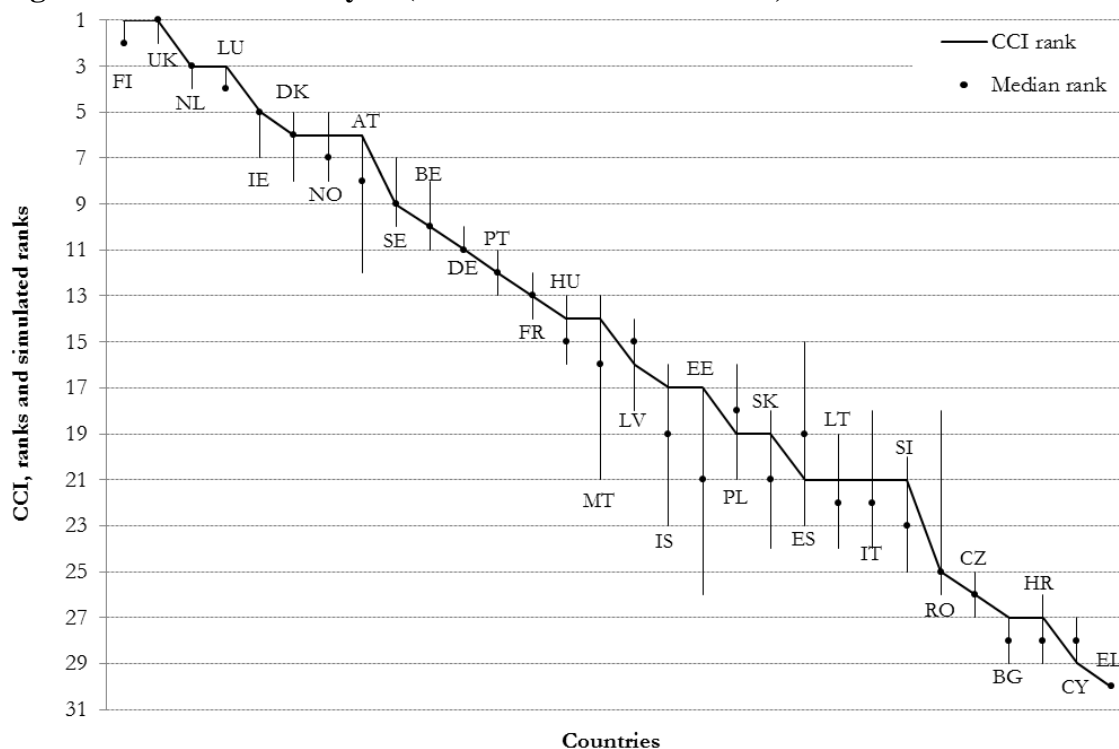
The main results of the robustness analysis are shown in Figure 3 with median ranks and 90% confidence intervals computed across the 4,000 Monte Carlo simulations for the CCI. Countries are ordered from best to worst according to their reference rank (black line), the dot being the median rank. Error bars represent, for each country, the 90% interval across all simulations. For the ease of interpreting the results we provide a conversion table for the country codes in appendix.

Table 9 shows original rankings of the CCI and the 90% confidence intervals for the simulated ranks. These confidence intervals express the uncertainty in the rankings carried by the simulated alternatives about the weighting schemes, the aggregation methods and the decision to normalise data. It can be verified that all country ranks lay within the simulated intervals. Two thirds of the countries are relatively stable and do not shift more than 4 positions. The remaining one third

countries record ranking shifts between 5 and 9 positions and include East-European countries (Estonia, Romania, Slovakia, Latvia and Poland), Southern-European countries (Italy and Malta) and West-European countries (Austria and Iceland). The most striking divergence in ranks is observed for Estonia with a difference of 9 positions across the simulations. This divergence for Estonia is caused by its high variance at pillar level that leads eventually to large differences in the index score resulting from the simulations for compensatory and non-compensatory aggregation methods.

Comparing the CCI ranks with the median ranks provides a more stable pattern: the median rank is close to the reference rank for all the countries. Estonia (EE) is the only country recording a difference of 4 positions, while all other countries report differences ranging between 1 and 2. Forty percent of the countries do not change.

Figure 3 Robustness analysis (CCI rank vs. median rank, 90% confidence intervals)



Note: Country names corresponding to the country codes can be found in appendix. The Spearman rank correlation between the median rank and the CCI rank is 0.991. Median ranks and intervals are calculated over 4,000 simulated scenarios combining random weights, normalisation, and geometric versus arithmetic average at the indicator level.

Table 9 Country ranks and 90% intervals for the CCI

Country	Rank	Median Rank	Interval	Country	Rank	Median Rank	Interval
FI	1	2	[1, 2]	LV	16	15	[14, 18]
UK	1	1	[1, 2]	IS	17	19	[16, 23]
NL	3	3	[3, 4]	EE	17	21	[17, 26]
LU	3	4	[3, 4]	PL	19	18	[16, 21]
IE	5	5	[5, 7]	SK	19	21	[18, 24]
DK	6	6	[5, 8]	ES	21	19	[15, 23]
NO	6	7	[5, 8]	LT	21	22	[19, 24]
AT	6	8	[6, 12]	IT	21	22	[18, 24]
SE	9	9	[7, 10]	SI	21	23	[20, 25]
BE	10	10	[8, 11]	RO	25	25	[18, 26]
DE	11	11	[10, 11]	CZ	26	26	[25, 27]
PT	12	12	[11, 13]	BG	27	28	[27, 29]
FR	13	13	[12, 14]	HR	27	28	[26, 29]
HU	14	15	[13, 16]	CY	29	28	[27, 29]
MT	14	16	[13, 21]	EL	30	30	[30, 30]

Note: Country names corresponding to the country codes can be found in appendix.

1.3.3.2 *Sensitivity analysis results*

Complementary to the uncertainty analysis, sensitivity analysis has been used to identify which of the modelling assumptions have the highest impact on certain country ranks. Plots a) and b) in Figure 4 relate the CCI rankings to rankings with one-at-a-time changes of either the normalisation method or the geometric aggregation formula, with equal weights. In plot c) we perform a sensitivity analysis in which we assume two changes at a time with respect to the CCI ranking, i.e. we assume normalisation and geometric average together.

The patterns in these graphs reveal that the aggregation method has the highest influence on the rankings, although its impact remains modest. When geometric aggregation is assumed, 96% of the countries record an absolute difference in ranking of maximum 2 positions, except for Spain (gaining 3 positions), Romania (losing 4 positions), and Estonia (gaining 7 positions). The impact of normalisation on the rankings is almost negligible.⁷ Hence, from a statistical point of

⁷ Although common practice suggests using non-normalised data for percentages, we performed a sensitivity check with normalised data, since it may have an impact on the index. This is especially the case when the underlying indicators are very dissimilar in terms of variance (e.g. indicators with percentages from 0-100, while others only range from 50-80 percent). In such a situation, non-normalised indicators with lower variances can potentially drive the ranking of the index, hence normalisation may be advisable.

view the choice of the developing team to use non-normalised data is justified for the particular case of the 9th edition of the CCI. However, in the new framework this methodological choice should be tested again.

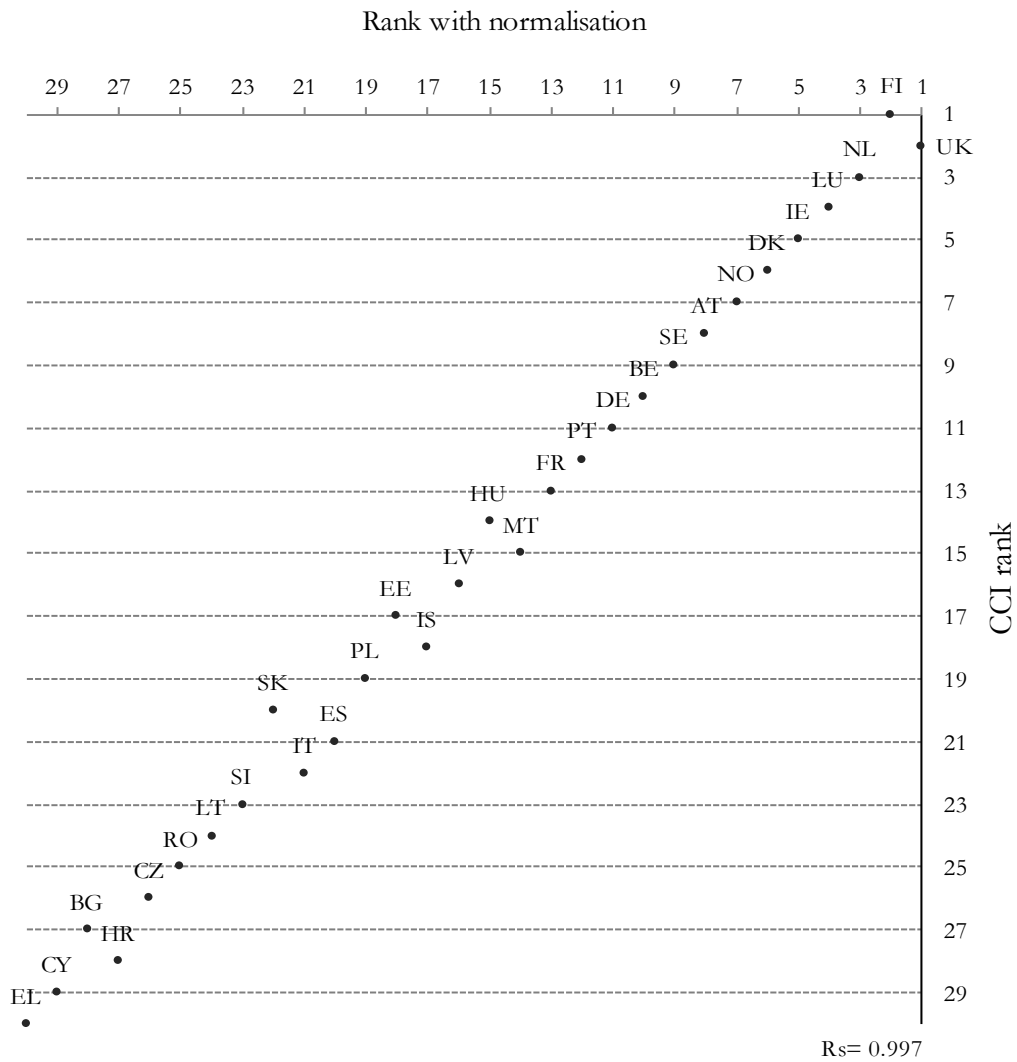
Similar evidence is found in Figure 5 which presents the box plots of ranking shifts with respect to the original ranking due to random weights (left box plot), normalisation (middle box plot) and aggregation (right box plot). Overall, the impact of the various modelling choices remains quite small. Again, we observe that normalisation and the averaging method have a limited impact on the rankings. Therefore, the decision not to normalise the data used for constructing the CCI is justified from a statistical point of view. Nevertheless, based on standard deviation of the squared correlations we observe that the pillars based on normalised data are slightly more balanced with respect to the index.

Figure 4 Sensitivity analysis - impact of modelling choices

a)

Consumer Condition Index

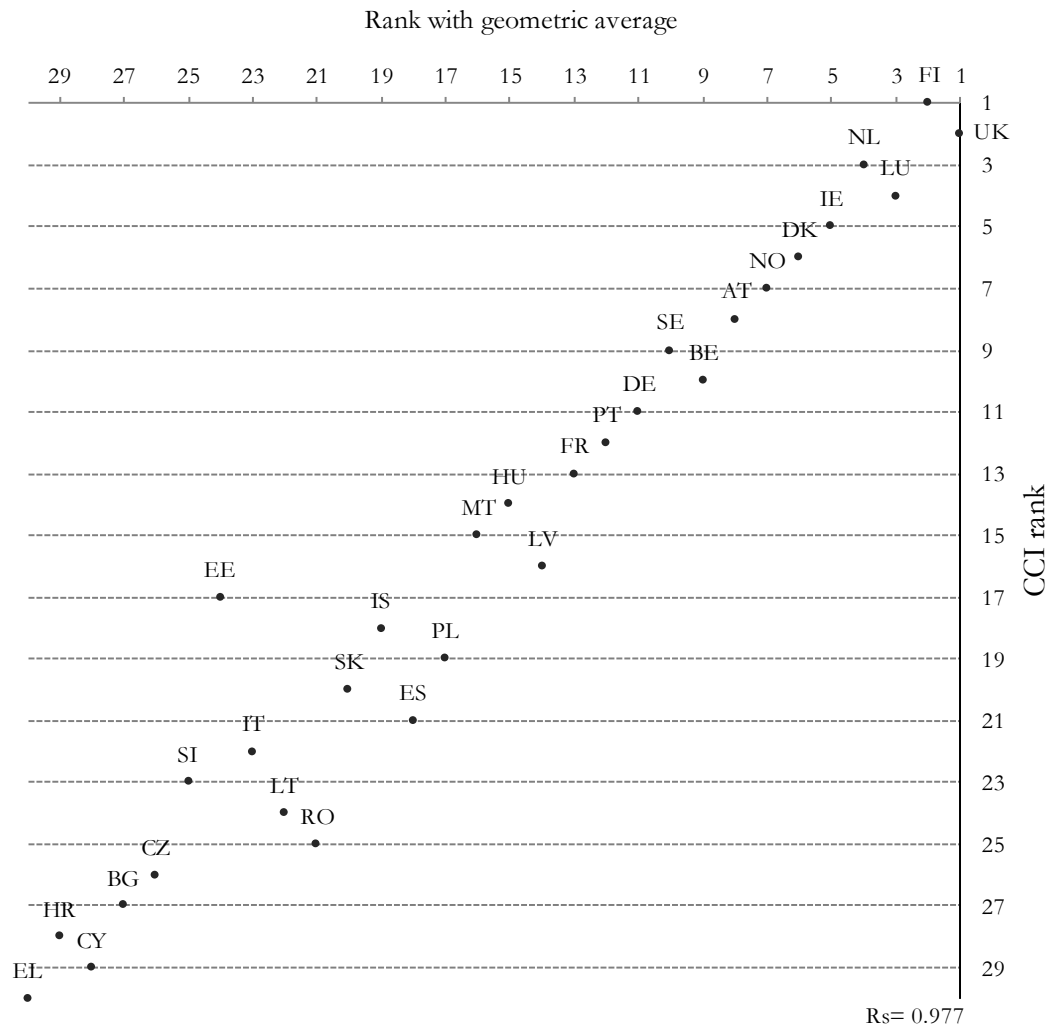
Sensitivity of ranking due to changes in normalisation



b)

Consumer Condition Index

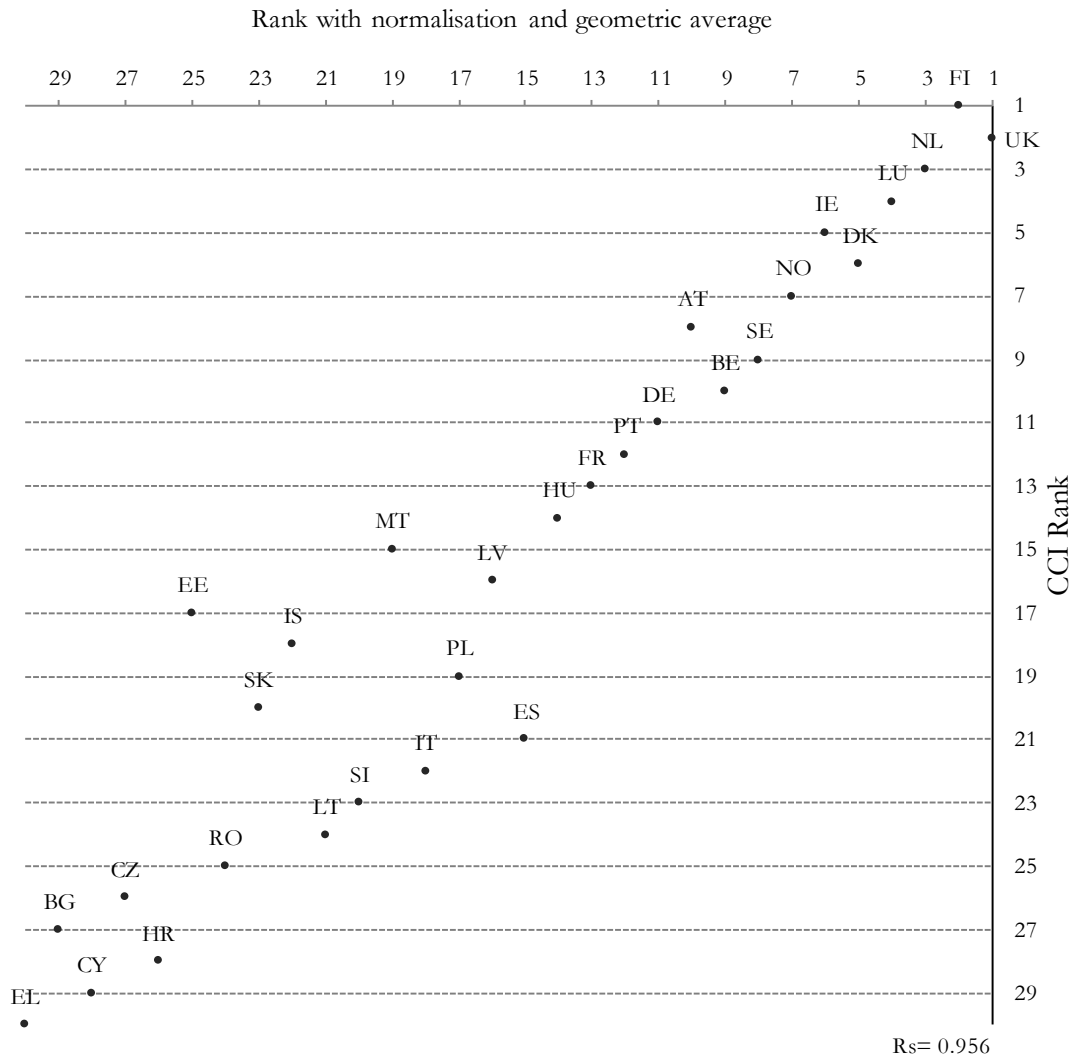
Sensitivity of ranking due to changes in averaging methods



c)

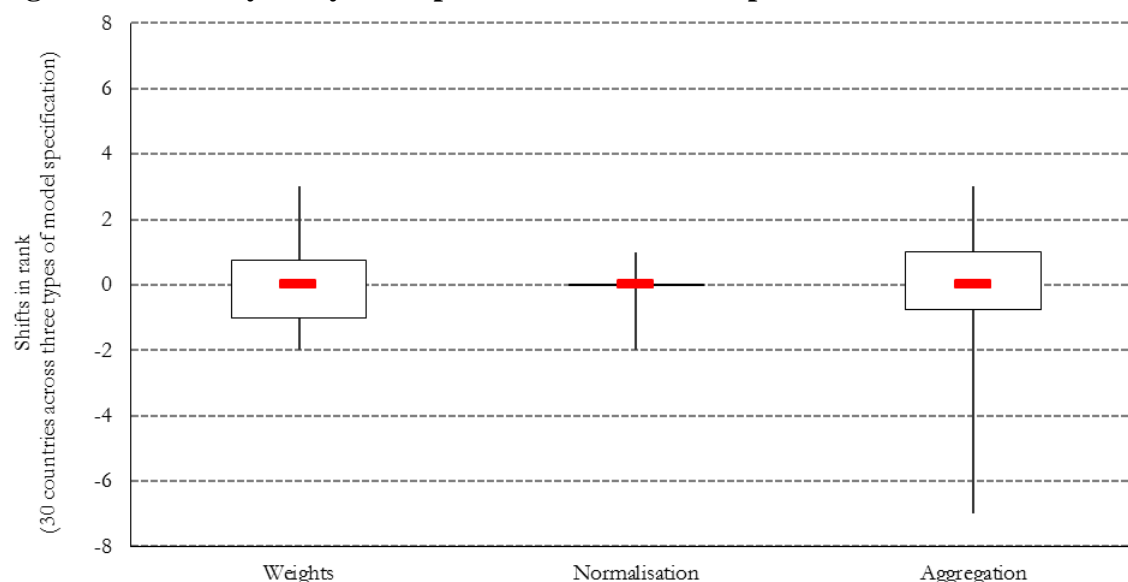
Consumer Condition Index

Sensitivity of ranking due to changes in normalisation and averaging methods



Note: Country names corresponding to the country codes can be found in appendix.

Figure 5 Sensitivity analysis: impact of various model specifications on the reference model



1.3.3.3 *Distance to the efficient frontier in the CCI by Data Envelopment Analysis*

Several policy issues related to consumer conditions at the national level entail an intricate balance between broad EU priorities and specific country strategies. Comparing the multi-dimensional performance on consumer conditions by assigning a fixed set of weights to every country may harm the acceptance of a consumer conditions index whose weighting scheme might not be fair to individual countries. Recent literature on Data Envelopment Analysis (DEA) applied to real decision-making has the appealing feature to determine weights that maximise the overall score of each decision-making unit (see Box 1 for a brief mathematical formulation of DEA). In this chapter, we relax the assumption of fixed indicator weights common to all countries and we let country-specific weights to be determined by DEA to maximise countries' scores. In theory, countries are free to decide the relative contribution of each indicator to their score in order to achieve the best possible score given their actual consumer conditions. In practice, the DEA method assigns higher (lower) weights to those indicators in which a country is relatively strong (weak). We set a minimum and maximum threshold to rule out the possibility that countries achieve a perfect score by assigning a weight of 100 to the strongest indicator, which implies a weight of 0 to the weakest indicator.

We allow countries to achieve a maximum score by ranging from the smallest weight of 5% to 20%. As such, the lower bound allows understanding the impact of the minimal implementation of policies related to specific issues on consumer conditions. The upper-bound is set to 20% in order to have a differentiation among the weighting scheme of the twelve pillars so to identify which policies are (even if only slightly) more preferred by each country. Setting the boundary at a higher level would have had the risk of an excessive polarisation of countries' preferences.

The DEA score is then measured as the weighted average of all twelve indicator scores, where the weights are the country-specific DEA weights, and the best performance among all other countries with those same weights. The DEA score can be interpreted as a measure of 'the distance to the efficient frontier'.

Table 10 presents the pie-shares and DEA scores for all countries, next to the CCI efficiency. The CCI efficiency is calculated for each country as the ratio of the DEA score with the CCI score of the best performer. All pie-shares are in accordance with the starting point of granting leeway to each country when assigning shares, while not violating the (relative) upper and lower bounds. The pie-shares are quite diverse, reflecting the different national consumer conditions.

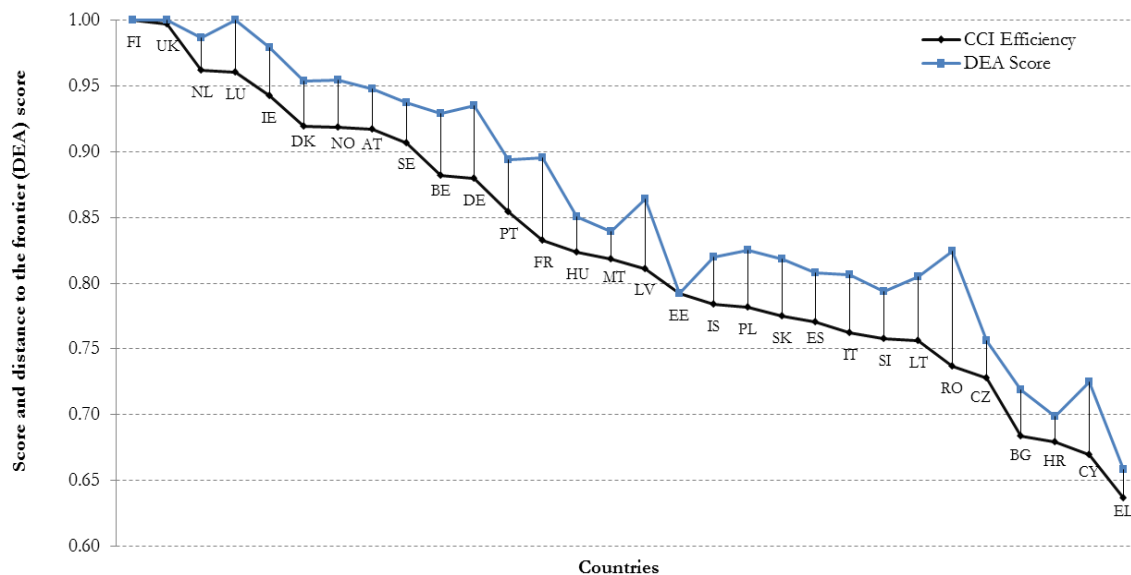
For example, Finland assigns 15% of its DEA to the "Percentage of consumers who were satisfied with complaint handling by retailer/provider", while the same indicator only accounts for 6% of the United Kingdom's DEA-score. Four countries assign the maximum allowed (i.e. 20%) to the "Percentage of consumers who were satisfied with complaint handling by retailer/provider". Figure 6 shows how close the DEA scores and the CCI scores are for all 30 countries (correlation of 0.982). Three countries - Finland, United Kingdom and Estonia- cannot reach higher efficiency since they are already on the frontier. (i.e. DEA equal to 1). Romania can most improve – with respect to other countries - since it has currently the highest divergence between the CCI efficiency and the DEA score.

Table 10 Pie-shares (absolute terms) and efficiency scores for all countries in the CCI

	Trust1	Trust2	Trust3	Trust4	Enforcement1	Enforcement2	Complaints1	Complaints2	Redress1	Redress2	Safety1	Safety2	DEA Score	CCI Efficiency
FI	0.06	0.07	0.06	0.06	0.06	0.08	0.07	0.15	0.20	0.05	0.07	0.07	1.00	1.00
UK	0.18	0.12	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.14	0.06	0.06	1.00	1.00
NL	0.05	0.05	0.05	0.20	0.05	0.05	0.13	0.05	0.05	0.05	0.07	0.20	0.99	0.96
LU	0.06	0.17	0.06	0.06	0.05	0.05	0.05	0.05	0.14	0.20	0.05	0.05	1.00	0.96
IE	0.05	0.05	0.05	0.14	0.05	0.05	0.06	0.05	0.20	0.20	0.05	0.05	0.98	0.94
DK	0.05	0.07	0.05	0.05	0.05	0.05	0.20	0.20	0.05	0.13	0.05	0.05	0.95	0.92
NO	0.05	0.05	0.05	0.05	0.05	0.05	0.20	0.20	0.05	0.11	0.05	0.09	0.95	0.92
AT	0.20	0.05	0.06	0.14	0.05	0.05	0.05	0.20	0.05	0.05	0.05	0.05	0.95	0.92
SE	0.05	0.05	0.05	0.14	0.06	0.05	0.20	0.20	0.05	0.05	0.05	0.05	0.94	0.91
BE	0.05	0.05	0.05	0.05	0.05	0.20	0.05	0.05	0.16	0.19	0.05	0.05	0.93	0.88
DE	0.05	0.05	0.05	0.05	0.15	0.05	0.20	0.20	0.05	0.05	0.05	0.05	0.93	0.88
PT	0.05	0.05	0.05	0.05	0.05	0.20	0.20	0.15	0.05	0.05	0.05	0.05	0.89	0.85
FR	0.05	0.05	0.05	0.20	0.05	0.05	0.05	0.20	0.05	0.15	0.05	0.05	0.89	0.83
HU	0.05	0.05	0.05	0.11	0.05	0.20	0.05	0.09	0.05	0.05	0.05	0.20	0.85	0.82
MT	0.05	0.05	0.05	0.05	0.05	0.19	0.20	0.05	0.05	0.05	0.05	0.16	0.84	0.82
LV	0.05	0.05	0.05	0.05	0.05	0.20	0.05	0.20	0.06	0.14	0.05	0.05	0.86	0.81
EE	0.05	0.05	0.13	0.05	0.05	0.20	0.05	0.07	0.05	0.05	0.05	0.20	0.79	0.79
IS	0.05	0.05	0.05	0.05	0.05	0.16	0.20	0.19	0.05	0.05	0.05	0.05	0.82	0.78
PL	0.05	0.05	0.05	0.08	0.05	0.12	0.20	0.20	0.05	0.05	0.05	0.05	0.82	0.78
SK	0.05	0.05	0.13	0.05	0.05	0.05	0.20	0.20	0.05	0.05	0.05	0.07	0.82	0.77
ES	0.05	0.05	0.05	0.15	0.05	0.20	0.20	0.05	0.05	0.05	0.05	0.05	0.81	0.77
IT	0.05	0.05	0.05	0.05	0.16	0.20	0.05	0.19	0.05	0.05	0.05	0.05	0.81	0.76
SI	0.05	0.05	0.05	0.05	0.05	0.17	0.20	0.18	0.05	0.05	0.05	0.05	0.79	0.76
LT	0.05	0.05	0.05	0.05	0.14	0.20	0.05	0.20	0.05	0.05	0.05	0.06	0.80	0.76
RO	0.05	0.05	0.05	0.05	0.05	0.16	0.05	0.05	0.19	0.20	0.05	0.05	0.82	0.74
CZ	0.05	0.05	0.05	0.20	0.05	0.05	0.05	0.13	0.05	0.07	0.05	0.20	0.76	0.73
BG	0.05	0.05	0.05	0.05	0.05	0.20	0.05	0.20	0.05	0.11	0.09	0.05	0.72	0.68
HR	0.05	0.05	0.06	0.05	0.14	0.20	0.05	0.20	0.05	0.05	0.05	0.05	0.70	0.68
CY	0.05	0.05	0.05	0.05	0.05	0.05	0.14	0.06	0.20	0.20	0.05	0.05	0.73	0.67
EL	0.05	0.05	0.05	0.05	0.05	0.11	0.05	0.20	0.09	0.20	0.05	0.05	0.66	0.64

Note: Country names corresponding to the country codes can be found in appendix. Values in bold indicate that this value equals the lower 5% (or upper 20%) bound of the relative pie-share constraint associated with this pillar.

Figure 6 Data envelopment analysis - ‘distance to the efficient frontier’ and scores



Note: Country names corresponding to the country codes can be found in appendix.

Box 1 Data envelopment analysis

The original question in the DEA-literature was how to measure each unit's relative efficiency in production compared to a sample of peers, given observations on input and output quantities and, often, no reliable information on prices (Charnes and Cooper, 1985). A notable difference between the original DEA question and the one applied here is that no differentiation between inputs and outputs is made (Melyn and Moesen, 1991; Cherchye et al., 2008). To estimate DEA-based distance to the efficient frontier scores, we consider the $m=12$ indicators in the CCI for $n=30$ countries, with y_{ij} the value of pillar j in country i . The objective is to combine the indicator scores per country into a single number, calculated as the weighted average of the m indicators, where w_i represents the weight of the i^{th} indicator. In absence of reliable information about the true weights, the weights that maximise the DEA-based scores are endogenously determined. This gives the following linear programming problem for each country j :

$$Y_i = \max_{w_{ij}} \frac{\sum_{j=1}^{12} y_{ij} w_{ij}}{\max_{y_c \in \{dataset\}} \sum_{j=1}^{12} y_{cj} w_{ij}} \quad (bounding\ constraint)$$

Subject to

$$w_{ij} \geq 0, \text{ where } j = 1, \dots, 12, i = 1, \dots, 30 \quad (non-negativity\ constraint)$$

In this basic programming problem, the weights are non-negative and a country's score is between 0 (worst) and 1 (best).

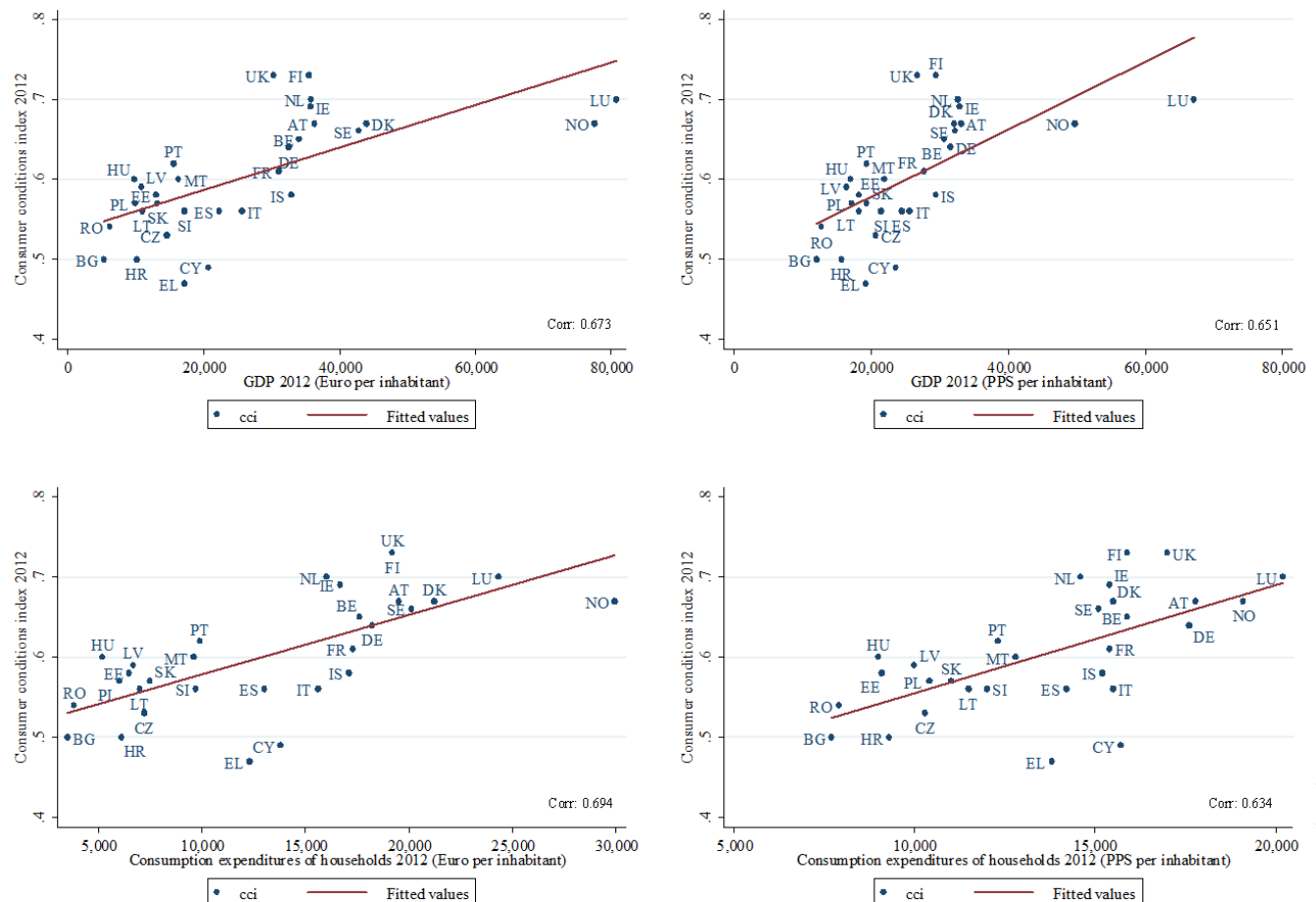
1.3.4 Comparing CCI with economic indicators

This chapter discusses the relationship between consumer conditions at the national level - as measured by the CCI – and indicators on: 1) economic performance, and 2) market competitiveness, and 3) other data sources. Eventually we assess the limitations of these analyses.

1.3.4.1 Economic performance

In Figure 7 we investigate the relationship between consumer conditions and economic performance through four scatter plots and correlations between the CCI and, respectively, the gross domestic product per capita and the household final consumption expenditure per capita in 2012 (both measured in Euro per inhabitant or purchasing power parity per inhabitant).

Figure 7 Scatter plots and correlations between CCI and economic performance



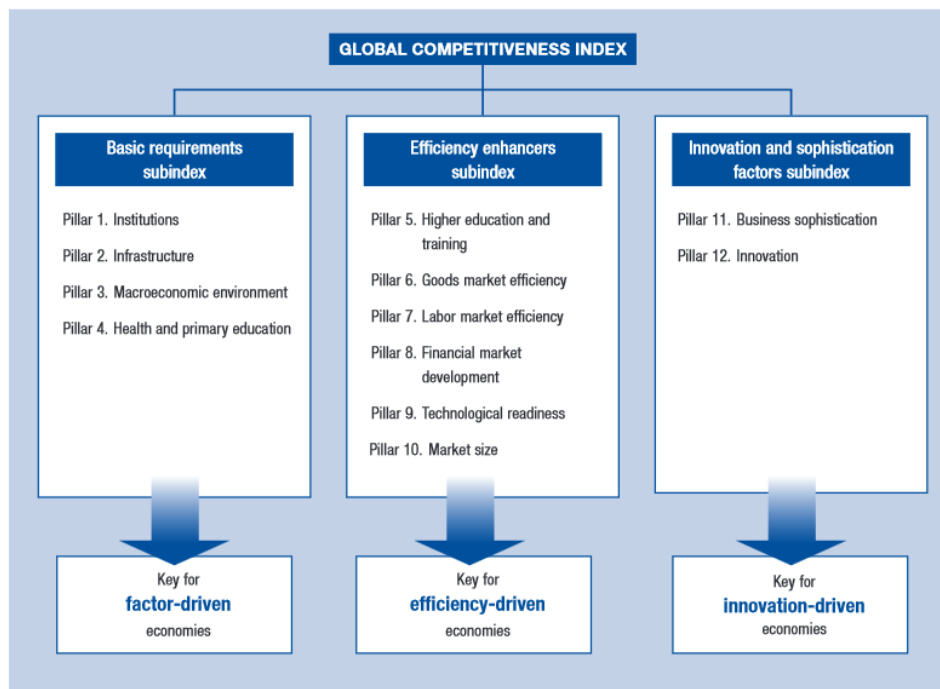
Note: Country names corresponding to the country codes can be found in appendix. Corr. Indicate the Pearson correlations.

The plots reveal positive correlations, indicating that countries with better consumer conditions have also higher economic performances and living standards. Overall, R^2 values (measured by the squared Pearson correlations) are quite high ranging from 40% to 48%, although in the upper plots of Figure 7 Luxembourg and Norway evidently bias the picture due to large GDP per capita. When excluding these two countries, both correlations increase to 0.72 making the regression line steeper. We also took into account different specifications of GDP growth, observing that squared correlations with CCI are lower than 4%. Taking the growth levels (i.e. 2011-2012) for the GDP indicators of Figure 7, we do not find significant correlations with the CCI (all of them are lower than 0.30). This result may be caused by the fact that the level of consumer conditions requires time to affect economic growth.

1.3.4.2 *Market competitiveness*

Furthermore, we employ the Global Competitiveness Index (GCI) of 2012 developed by the World Economic Forum (Sala-i-Martin et al., 2012) to explore the relationship between the CCI and the market competitiveness. This index aims at capturing micro- and macro-economic drivers of national competitiveness, and it is a weighted average of several components that measure different aspects of competitiveness. The GCI includes twelve pillars that are grouped in three main dimensions, each focusing on a different aspect of competitiveness. The first dimension concerns the basic requirements for a country to be competitive. It includes pillars (and underlying variables) on a country's infrastructure, institutions, macroeconomic environment, health and primary education. The second dimension is about variables that enhance the efficiency of a country, containing pillars on e.g. good market efficiency, labour market efficiency, technical readiness of a market and financial market development. Finally, the third dimension includes pillars on the innovative performance and the business sophistication of a country. Figure 8 presents the Global Competitiveness Index framework as reported by the World Economic Forum (Sala-i-Martin et al., 2012, p. 8).

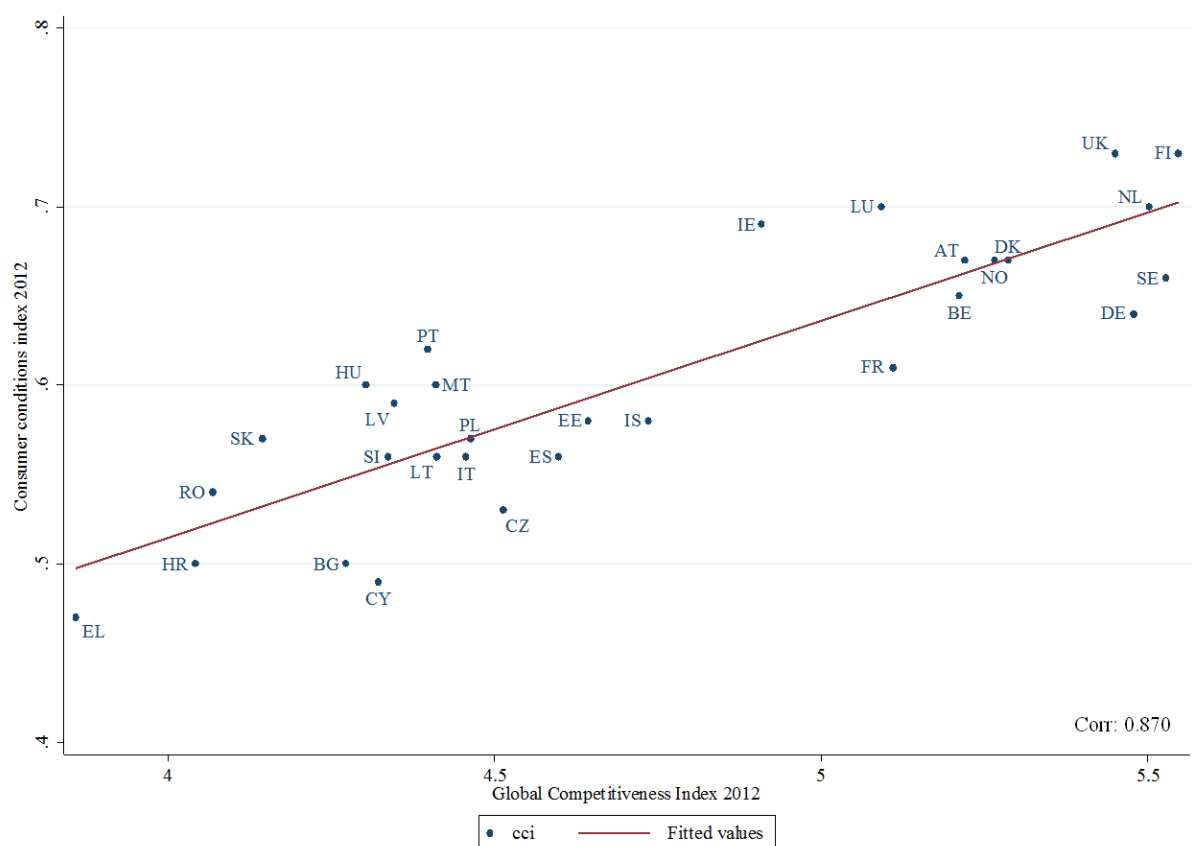
Figure 8 The global competitiveness index framework



Source: Global Competitiveness Report 2012-2013 (Sala-i-Martin et al., 2012, p. 8)

In Figure 9 we present the scatter plot and correlation value between the CCI, and the GCI in 2012. The two indexes are highly correlated (R^2 of 76%), and it is evident from the plot that the sample is divided into two groups of countries. The high performers – occupying the top-right area – are Northern and Scandinavian countries that have high levels of both indexes. In the bottom-left of the plot, there are instead Eastern and Mediterranean countries that have lower levels in both indexes.

Figure 9 Correlation plot between CCI and market competitiveness



Note: Country names corresponding to the country codes can be found in appendix. Corr. Indicate the Pearson correlations.

Already in the GCI report a reflection is made according to which the traditional distinction between developed and developing countries is about to turn into innovation-rich versus innovation-poor countries. Consequently innovation is recognised to have a key role toward development of societies. Therefore business leaders, governments, and civil societies should cooperate to create conditions under which innovation can flourish and prosper. Innovation that

generates from appropriate economic policies is believed to create the right conditions for growth and reforms. This translates in all the economic domains, hence also in the context of the consumer conditions framework. Hence, more developed countries in terms of market competitiveness seem to record higher levels of consumer conditions, while transition or less developed economies are lagging behind. Figure 9 digs out an interesting relevant feature about the relation between innovation and consumer conditions that certainly deserve future deepening to understand the conditions (in terms of innovations, and technological advancements to foster fair consumer conditions or vice versa) enjoyed by the two groups of countries evidenced in the plot.

In subsequent analyses we explore the correlations between the CCI and more fine-grained levels of the competitiveness index by including comparisons at the sub-index, pillar, and indicator dimensions. Table 11 presents the most relevant correlations between the CCI and the different components of the global competitiveness index. The highest correlations are found in the first pillar of the basic requirements sub-index. This first pillar contains information on the country's institutions and has an overall correlation with the CCI of 0.80. Among its indicators, the highest correlations with CCI are recorded for private institutions, property rights and intellectual property protection. The pillars – and their underlying indicators – on infrastructure (e.g. quality of transport infrastructure and electricity and telephone infrastructure), health & primary education (e.g. life expectancy, prevalence of diseases, primary education enrolment), macro-economic environment (e.g. government budget balance, debt and inflation) and market size (e.g. export, domestic and foreign market size index) reveal relatively low correlations with CCI. While the correlations for the first two pillars are 0.58 and 0.56, the two latter dimensions record correlations of 0.27 and 0.24. Remaining pillars within the sub-indices of efficiency enhancers and innovation show higher correlations, with levels oscillating between 0.65 and 0.80. Indicators with the highest correlations within these pillars are extent of staff training, reliance on professional management, country capacity to attract talent, and regulation of security exchanges. Correlations with other indicators within these pillars remain relatively high (0.70-0.79).

Overall countries that perform well in terms of consumer conditions as measured by the CCI are also recording higher ranks and scores related to their market competitiveness, both at the index level and at the fine-grained sub-indices and pillar levels.

Table 11 Correlations between the CCI and the global competitiveness index

Basic Requirements (ranks)	0.80	1st pillar: Institutions	0.81	1.01 Property rights, 1-7 (best)	0.83
				1.02 Intellectual property protection, 1-7 (best)	0.83
				1.03 Diversion of public funds, 1-7 (best)	0.77
				1.04 Public trust in politicians, 1-7 (best)	0.80
				1.05 Irregular payments and bribes, 1-7 (best)	0.78
				1.06 Judicial independence, 1-7 (best)	0.81
				1.07 Favoritism in decisions of government officials, 1-7 (best)	0.79
				1.10 Efficiency of legal framework in settling disputes, 1-7 (best)	0.77
				1.11 Efficiency of legal framework in challenging regs., 1-7 (best)	0.75
				1.16 Reliability of police services, 1-7 (best)	0.71
				1.A. Public institutions, 1-7 (best)	0.81
				1.17 Ethical behavior of firms, 1-7 (best)	0.78
				1.18 Strength of auditing and reporting standards, 1-7 (best)	0.76
				1.19 Efficacy of corporate boards, 1-7 (best)	0.80
				1.20 Protection of minority shareholders' interests, 1-7 (best)	0.79
				1.B. Private institutions, 1-7 (best)	0.82
				2nd pillar: Infrastructure	0.58
				3rd pillar: Macroeconomic Environment	0.27
				4th pillar: Health and Primary Education	0.56
Efficiency Enhancers (ranks)	0.84	5th pillar: Higher Education and Training	0.70	5.08 Extent of staff training, 1-7 (best)	0.82
				5.C. On-the-job training, 1-7 (best)	0.77
		6th pillar: Goods Market Efficiency	0.77	6.03 Effectiveness of anti-monopoly policy, 1-7 (best)	0.78
				6.08 Agricultural policy costs, 1-7 (best)	0.72
				6.13 Burden of customs procedures, 1-7 (best)	0.75
				6.A. Competition, 1-7 (best)	0.73
				6.B. Quality of demand conditions, 1-7 (best)	0.71
		7th pillar: Labor Market Efficiency	0.66	7.07 Reliance on professional management, 1-7 (best)	0.80
				7.08 Country capacity to retain talent, 1-7 (best)	0.73
				7.09 Country capacity to attract talent, 1-7 (best)	0.81
				7.B. Efficient use of talent, 1-7 (best)	0.76
		8th pillar: Financial Market Development	0.65	8.02 Affordability of financial services, 1-7 (best)	0.70
				8.01 Availability of financial services, 1-7 (best)	0.75
				8.03 Financing through local equity market, 1-7 (best)	0.75
				8.A. Efficiency, 1-7 (best)	0.71
				8.07 Regulation of securities exchanges, 1-7 (best)	0.80
		9th pillar: Technological Readiness	0.80	9.01 Availability of latest technologies, 1-7 (best)	0.71
				9.02 Firm-level technology absorption, 1-7 (best)	0.70
				9.A. Technological adoption, 1-7 (best)	0.77
				9.04 Individuals using Internet, %	0.79
				9.05 Fixed broadband Internet subscriptions/100 pop.	0.71
				9.B. ICT use , 1-7 (best)	0.72
		10th pillar: Market Size	0.24		
Innovation Sophistication Factors (ranks)	0.76	11th pillar: Business Sophistication	0.73	11.03 State of cluster development, 1-7 (best)	0.71
				11.07 Production process sophistication, 1-7 (best)	0.77
				11.08 Extent of marketing, 1-7 (best)	0.78
		12th pillar: Innovation	0.78	12.01 Capacity for innovation, 1-7 (best)	0.78
				12.02 Quality of scientific research institutions, 1-7 (best)	0.74
				12.03 Company spending on R&D, 1-7 (best)	0.74
				12.04 University-industry collaboration in R&D, 1-7 (best)	0.79
				12.05 Gov't procurement of advanced tech products, 1-7 (best)	0.74

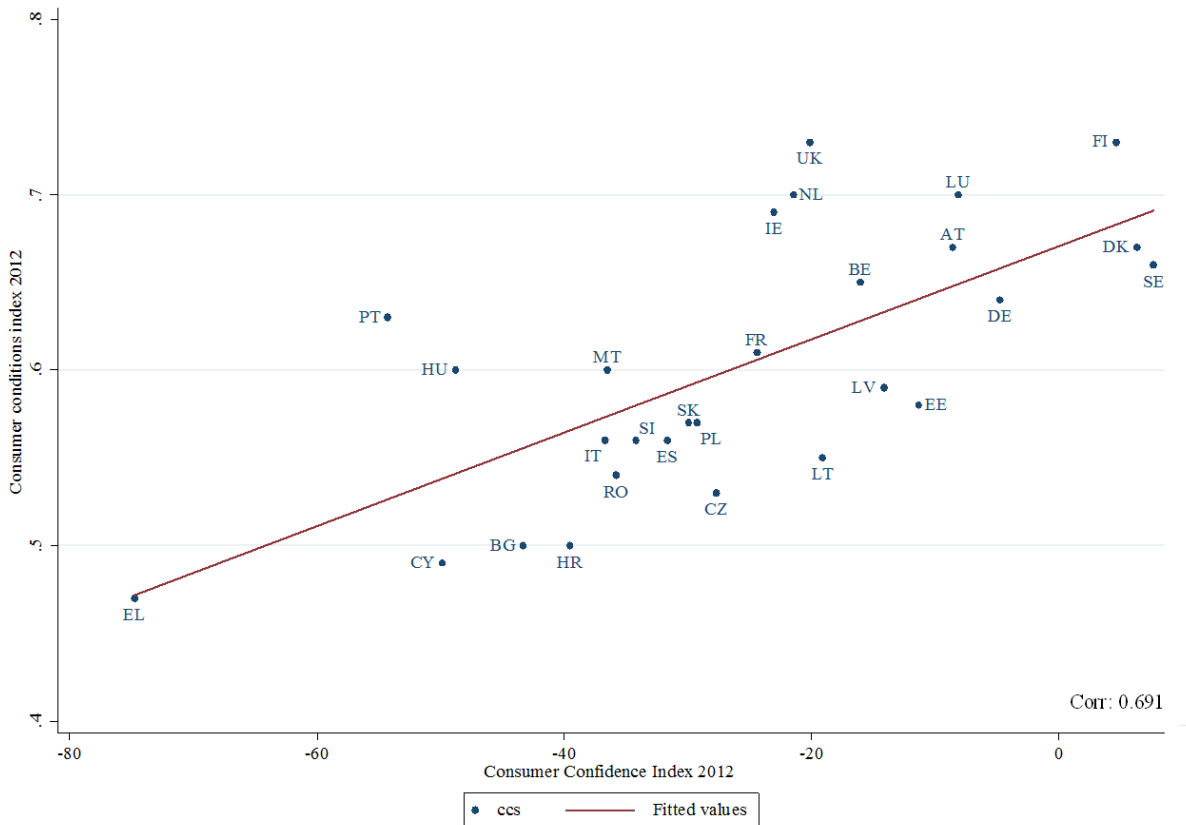
Note: the correlations are given per dimension of the global competitiveness index.

1.3.4.3 Other data sources

Besides the global competitiveness and market performance indicators as GDP, we also investigated other data sources that could be linked with the consumer conditions index. The Ease of Doing Business Index by the World Bank assesses regulations that affect domestic firms in various domains including starting a business, resolving insolvency and trading across borders. Several components of this index can be potentially related to consumer conditions in a country. The highest correlations are found for trading across borders (around 0.60), indicating that countries with better regulation towards cross-border sales are associated with better consumer conditions. However, all the other components of this index reveal rather small correlations with the CCI.

Another data source that has been explored is the consumer confidence index developed by the Directorate General for Economic and Financial Affairs (DG ECFIN). The consumer confidence indicator is based on harmonised business and consumer surveys conducted in the EU28 Member States. This indicator is “the arithmetic average of the balances (in percentage points) of the answers to the questions on the financial situation of households, the general economic situation, unemployment expectations (with inverted sign) and savings, all over the next 12 months. Balances are seasonally adjusted.” (DG ECFIN, 2014, p 17). We used the 2012 year average of the monthly consumer confidence indicators to compare with the Consumer Conditions Index of 2012. In Figure 10 we present the scatter plot and correlation value between the CCI, and the consumer confidence index in 2012. The two indexes are not so highly correlated (R^2 of 47%). This is not surprising since both indicators are measuring different aspects of the economy. The consumer confidence index is merely focused on measuring consumers trust in the state of the economy with respect to the general situation as described by the unemployment rate and the households’ situation in terms of financial resources. In contrast, the consumer conditions index is orientated towards measures of product safety, of consumer knowledge and trust in the legislation and of the occurrence of unfair commercial practices.

Figure 10 Correlation plot between CCI and the consumer confidence indicator



Note: Country names corresponding to the country codes can be found in appendix. Corr. indicates the Pearson correlations.

1.3.4.4 Limitations of correlations

The investigations presented here are based on correlation analyses to provide preliminary evidence of the dynamics between consumer conditions and macro-economic indicators. However, correlation analyses have some limitations. First, they do not allow for detection of causal-relationships. Hence, it might be that the GDP per capita affects consumer conditions (example: richer countries can devote more resources to education), or the opposite (higher GDP per capita in countries consumer markets work better). Second, it is possible that the correlations are driven by spurious relationships in case a third variable affects simultaneously both the GDP per capita and the CCI. An in-depth analysis employing time-series models and Granger causality tests (among others) could be envisaged to overcome these limitations. However, these empirical investigations exceed the scope of this project since long time-series are needed to perform these tests (i.e. at least 10 years, while the CCI is only available for 2006-2013). Hence,

Granger causality tests can only be performed for future waves of the consumer survey (Liu and Bahadori, 2013). Formal test of causal relationship using the concept of Granger causation will become implementable with future waves of the CCI. A variable X is said to granger-cause a variable Y if lagged values of X can help to predict current values of Y significantly better than own lagged values of Y. More practically, one should estimate linear models of the influence of lagged values of the CCI and of the economic performance (or of the market competitiveness) on current levels of CCI. In addition linear models of the economic performance or of the market competitiveness should be estimated on their own lagged values and on those of CCI.

1.3.5 Conclusions

The Consumers Directorate of DG Justice and Consumers has released the 9th edition of the Consumer Conditions Scoreboard in July 2013. This scoreboard provides evidence on ‘how the single market is performing for EU consumers and alerts about potential problems’ (European Commission, 2013, p. 3). A first part of the scoreboard explores the improvements made towards a more integrated structure of the EU retail market, and examines the consumer levels of confidence and protection while shopping in the EU, including cross-border and online purchases. A second part of the scoreboard is more confined at the national level and explores the quality of consumer conditions across the 28 EU Member States, Iceland and Norway. In order to facilitate this monitoring assessment, the quality of the consumer environment has been summarised in the scoreboard through the Consumer Conditions Index (CCI). This index is an aggregated measure of 12 indicators reflecting on five main dimensions of the consumer environment: feeling protected, illicit commercial practices, consumer complaints, redress, and product safety

The Econometrics and Applied Statistics Unit at the European Commission Joint Research Centre (JRC) in Ispra-Italy was invited by the Consumers Directorate of DG Justice and Consumers to audit and to explore the statistical soundness of the 9th edition of the CCI. This report provides a detailed audit of the index, based on an in-house quality control process that aims to ensure the transparency of the CCI methodology and the reliability of its results. This quality control process follows different steps to appraise the coherence of the index, including an exploration of the underlying framework, statistical tests about data, and an evaluation of the

index coherence through a set of correlation-based analyses and robustness controls about normalisation possibilities, weights and aggregation methods.

The dataset used for constructing the CCI stems from raw data of the EC consumers' and retailers' surveys conducted in autumn 2012. These surveys aim at collecting national data on consumer and retailer conditions. The 12 indicators of the index are expressed in percentages which are equally weighted in order to be first aggregated into the five dimensions mentioned above, and subsequently summarised into an index using the arithmetic average.

The statistical coherence of the CCI framework is first assessed by analysing the covariance structure within and across the five pillars of the index. The analysis reveals that the CCI is well-structured within the pillars, as all correlations within the five dimensions are significant and positive. This is also confirmed by principal component analyses for the respective pillars in which one principal latent component is captured for each pillar. However, the principal component analysis on all indicators reveals the existence of three different pillars instead of five as proposed in the CCI. In addition, analyses based on the standard deviation of squared correlations reveal that the importance of certain pillars within the CCI is unbalanced. The index seems to be primarily driven by pillars on consumer trust and product safety.

In a second step, sensitivity and uncertainty analyses of country ranks of the CCI are conducted to assess to what extent the results depend on the methodological choices made during the development of the index. This assessment is based on a multi-modelling approach implemented by Monte Carlo simulations that deal with three modelling alternatives related to the ascription of weights to individual indicators, aggregation methods for pillars, and normalisation of data. Uncertainty analysis confirms that country ranks remain relatively stable across the various simulations. We find that all countries report rank shifts of lower than 3 positions compared to the simulated median rank (40% of the countries remain even stable). Estonia is the only country recording a difference of 4 positions.

Sensitivity analysis reveals that the aggregation method has the highest influence on the rankings, although its impact remains modest. When geometric aggregation is assumed, 96% of

the countries record an absolute difference in ranking of maximum 2 positions, except for Spain (gaining 3 positions) Romania (losing 4 positions), and Estonia (gaining 7 positions). The impact of options related to weighting the indicators and normalising the data remains limited. With respect to the latter, the decision not to normalise the indicators is justified from a statistical point of view.

The CCI appears to be positively correlated with economic indicators on economic performance and market competitiveness, measured by GDP per capita, the final consumption expenditure of households per capita and the Global Competitiveness Index. These results provide a primary evidence of the association between these indicators and could be expanded in future research aimed at investigating the causal relationship among them.

Overall, the CCI index and the country ranks are fairly robust to methodological assumptions related to normalisation, weighting and aggregation formula. Consequently, inferences can be drawn for most countries in the CCI, whilst some caution may be needed for a few countries.

1.4 Country level international surveys of consumer conditions

Fiammetta Rossetti and Vincent Van Roy

In this chapter, we provide an overview of country-level surveys collecting information on consumer and business conditions. The purpose is to identify the best practices for the measurement of these aspects and to compare them with those analysed in the current EC surveys.

1.4.1 Introduction

The purpose of this chapter is to gain more in-depth insights on the various issues concerning consumer and retailer conditions that can be surveyed. A deep understanding of these issues is important to get fruitful ideas and suggestions for future revisions of the consumer conditions scoreboard. Hence, in the first part of this chapter we provide an overview of international surveys collecting empirical information on consumer and business conditions before, during and after commercial transactions of goods and services. The aim is not to present an exhaustive list of data sources and data availability, but rather to reflect on the issues of consumer and business conditions that are commonly dealt with.⁸ For each survey we present an overview of the research questions and methodologies used for collecting data. Surveys were retrieved with Google on a set of pre-defined keywords related to consumer and business conditions.⁹ We could mainly gather results in English, although we tried to use similar Google searches in other EU languages: Dutch, French, German, and Italian. The results of this latter search remain rather scarce and reveal only a few reports and surveys on a limited scale and scope. Searches with Dutch or French keywords do not bring to light any survey on consumer or retailer conditions at large scale. In the second part of the chapter we highlight the most important similarities and differences of these surveys with the questionnaires of the EC consumers' and retailers' surveys.

⁸ Some surveys are not discussed extensively due to a lack of easy-to-access references or due to a high degree of relatedness with other datasets included in the list. In such cases we only highlight the existence of the survey, while providing references for further reading.

⁹ The google search was conducted on September 5th, 2013 and includes all combinations of following keywords: survey, database, consumer conditions, retailer conditions, consumer detriment, consumer awareness, consumer satisfaction, unfair commercial practices, vulnerable consumers, consumer complaint, redress.

1.4.2 Overview of international surveys on consumer and business conditions

1.4.2.1 Australian National Survey (Australia, 2011)

The Australian National Survey aims at exploring the trading experiences of both consumers and businesses in Australia (Commonwealth of Australia, 2011). The survey measures consumers' and traders' awareness and knowledge of their respective rights and obligations in trading transactions. The Australian National Survey consists of two separate surveys the first is administered amongst the Australian general public to gather the perceptions, beliefs and experiences of consumers, while the second is addressed to businesses trading within or with Australia. Both surveys reflect consumer issues in 2009 and 2010. The main characteristics of the surveys on consumer and retailer conditions that we discuss in this report are summarised in Table 12.

Table 12 Overview of international surveys on consumer conditions

	Australian National Survey		Swedish Consumer Market Survey	Consumer Detriment Survey	Survey on Unfair Commercial Practices	Survey on Consumer Fraud	Consumer Sentinel Network Data Book	National Consumer Survey
Type of data	National Survey - Australia		National Survey - Sweden	National Survey - United Kingdom	National Survey - United Kingdom	National Survey - United States	Online database - United States	National Survey - New Zealand
Data coverage	Years 2009-2010		Year 2012	Year 2011	Last 2 years preceeding spring 2009	Year 2011	Period 2007-2012	Year 2009
Aim of data collection	Exploring trading experiences of consumers and businesses		Exploring consumer conditions in 45 selected markets in Sweden	Exploring the amount and the type of consumer detriments experienced in purchasing processes	Providing a measure of the awareness of unfair commercial practices and the extent to which consumers experienced them	Provide empirical evidence on the occurrences and the type of consumer fraud experienced	Online database containing serves as a helpful information tool to enhance and coordinate investigations among them	Obtaining relevant and accurate information of consumers' perception of and experience in the current market of New Zealand.
Target group	Consumers	Businesses	Consumers (between 18 and 75 years old)	Consumers (adults of Great Britain aged 16 or more)	Consumers	Consumers	Consumers	Consumers being 18 year or older
Methodology	<ul style="list-style-type: none"> - Online questionnaires and telephone interviews => Total of 5315 consumer surveys - Representative sample: 1) Online questionnaire: random selection from three panellists provided by external companies 2) Telephone interviews: random selection from telephone directory - Sample stratification: Quota's for age, gender, and rural/non-rural areas in each state 	<ul style="list-style-type: none"> - Telephone interviews => Total of 1210 business surveys - Representative sample: Telephone interviews: random selection from business directories - Sample stratification: Quota's for state size, employment size and industry 	<ul style="list-style-type: none"> - Online questionnaire => Total of 8130 respondents - Representative sample: Participants randomly selected from a panelist developed by Norstat. - Sample stratification: Quota's applied on age, gender and region. 	<ul style="list-style-type: none"> - Face-to-face interviews => Total of 10036 interviews - Representative sample: By moving around in omnibuses (location is randomly selected using a sample methodology developed by TNS) - Sample stratification: Sample frames and stratifications are constructed using census data on small area statistics of UK 	<ul style="list-style-type: none"> - Online questionnaires => Total of 1051 interviews - Representative sample: Sample selected by online invitation to fill in the questionnaire - Sample stratification: 1) Use of propensity scores to correct for a self-selection bias of individuals willing to answer online surveys 2) Use of weights for social and demographic factors (e.g. age, gender, education and region) 	<ul style="list-style-type: none"> - Telephone interviews => Total of 3638 interviews - Representative sample: Random selection from telephone directories 	<ul style="list-style-type: none"> Online database of official consumer complaints filed at law enforcement institutions and consumer protection agencies The CSN initiative was launched in 1997 and contained more than 8 million consumer records in 2012 	<ul style="list-style-type: none"> - Face-to-face interviews: => Total of 1000 interviews - Representative sample: Multi-stage sample design: random selection of geographic units and households within these units - Sample stratification: 1) Weights used as probability of selection within a household 2) Quota's with census data on age and gender
Related data sources	ACCC Enforcement and Compliance Survey (Australia, 2004)			Consumer Detriment Survey (Ireland, 2008)	AIM-CIAA survey on unfair commercial practices (Europe, 2009)		Consumer complaint survey (USA, 2011)	

Research questions

A first set of questions of these surveys deal with consumers' and businesses' awareness of existing consumer legislation. More specifically, respondents are asked about their awareness of and confidence in protection laws, law enforcement agencies and sources of information for redress procedures. A second group of questions is related to the experience of consumers and businesses and their behaviour towards problems. Consequently this chapter provides empirical evidence on the problems and the difficulties with redress experienced by consumers and businesses. In addition, this chapter includes questions on sources for information and advice, as well as actions taken by respondents seeking redress. Another type of questions is about the time and costs for consumers to resolve problems and their satisfaction with the outcome. Furthermore, the survey allows examining which type of consumer is more vulnerable to detriments by questioning them on their social and demographic characteristics. The final chapter concerns future considerations from consumers and businesses about upcoming regulations and enforcement policies.

Methodology

Responses for the consumer survey were gathered by means of online questionnaires and telephone interviews, resulting in a total collection of 5315 consumer surveys. To ensure a representative sample for the online surveys, respondents were randomly selected from three panels provided by external companies specialised in the supply of panelists. The sample for the telephone interviews was randomly drawn from electronic telephone directories. To obtain samples that represent the entire Australian population as close as possible, quotas were applied for age, gender and rural/non-rural areas in each state or territory. Responses for the business survey were collected by telephone interviews. The sample of businesses was randomly drawn from an electronic database of Australian business directories. Quotas were used for the state size, employment size and industry in order to obtain a survey sample that was representative for the population of Australian businesses.

Related data sources

The ACCC Enforcement and Compliance Survey conducted in Australia (Nielsen and Parker, 2005): this survey aims at collecting a wide range of quantitative data from Australian businesses in 2004 on their attitudes, beliefs and experiences with compliance to competition and consumer

protection legislation and the enforcement activities of the Australian Competition and Consumer Commission (ACCC). This survey was carried out on the 2321 largest Australian businesses, selected by number of employees. In the questionnaire businesses are assessed on their awareness of competition and consumer protection rules, their estimations of economic cost or gains of (non-)compliances in case of problems with competitors or consumers and their beliefs concerning the influence of third parties in the problem-solving process. We do not review this survey as it covers all companies (both wholesale and retailers) of large size.

1.4.2.2 Swedish consumer market survey (Sweden, 2012)

The Swedish consumer market survey has emerged from a need to complement statistics of consumer complaints with a broader picture of consumer conditions in Sweden (Swedish Consumer Agency, 2013). This survey has been conducted by the Swedish Consumer Agency and will be held annually in the upcoming years. The questionnaire provides a thorough consumer assessment on 45 selected markets in Sweden.

Research questions

The aim of the Swedish Consumer Market Survey is to identify consumer conditions along different dimensions, including transparency, trust, choices, behaviour, unsuccessful purchases, and the economic importance of markets for households. Questions dealing with transparency are primarily focused on capturing 1) the ability of consumers to find information, and 2) their ability to use this information adequately in their purchasing choices. This includes for instance the ease of comparing prices and quality of goods and services before the purchase and consumers' perception on the difficulty to understand purchasing terms and conditions. The dimension of trust involves the confidence of consumers in retailers/providers with respect to advertisements, their willingness to help in case of problems and the respect of consumer protection and legislation. The third dimension on 'choice' collects information about consumers' ability to choose goods and services from different retailers/providers (e.g. perception in ease of switching supplier, perceived level of competition between suppliers). While the previous dimensions were mainly focused on consumers' perception, the fourth dimension 'consumer behaviour' explores active choices of consumers based on their experience. The dimension of 'consumer behaviour' includes questions on price comparisons,

impulse purchases and actions taken to switch supplier. In order to compare and rank the efficient functioning of markets, eight questions from these four dimensions have been used to construct a consumer market index.

Two additional issues included in the survey, but not in the consumer market index, are the unsuccessful purchases and the economic importance of markets for households. The former dimension examines problems encountered during the purchase of goods or services. It collects information on consumers' complaints and dissatisfaction. The latter dimension explores the financial situation of consumers, and it is based on the market shares of household expenditure and the amount of spending in different markets.

Methodology

The first Swedish Consumer Market Survey was conducted in autumn 2012 as an online questionnaire of 34 questions. As the survey covers 45 markets, the questions have been slightly adapted to each market in order to facilitate the overall understanding. However, the content of the questions remain essentially unchanged. Respondents of the online survey were randomly selected from a panelist developed by Norstat. Quotas for age, gender and region were applied to obtain a representative sample at the national level.

1.4.2.3 Consumer detriment survey (UK, 2012)

The UK Consumer Detriment Survey is a national study, commissioned by Consumer Focus, which explores the amount and the type of problems experienced by costumers in their purchases over the latest 12 months (Consumer Focus, 2012). Responses to this survey, were collected early 2012. The main target of this survey was to provide a follow-up study with updated information of a similar survey administered in 2008 and commissioned by the Office of Fair Trading.

Research questions

A first block of questions aims at collecting accurate and sector-specific information on consumer detriments, both in terms of occurrences and distribution patterns across sectors. In addition, this aspect also includes questions on the time and cost to resolve consumer detriments, as well as on the type of organizations consumers contacted to seek for redress and the channels

used to introduce a (formal) complaint. In the second part of the survey respondents are questioned more in detail about one particular problem they encountered in the last year. This part of the survey specifically tries to obtain information on the ex-post outcomes for the consumers who had a negative experience, which does not only include the financial losses associated with the detriment but also non-financial effects (e.g., psychological impacts, consumers' confidence).

Methodology

Researchers conducted 10036 face-to-face interviews carried out on a representative sample of adults of Great Britain aged 16 years or more. All respondents were asked to answer the first part of the questionnaire, providing estimates of the amount and types of consumer detriments for UK in 2012. The second part of the questionnaire deals with more detailed issues on particular consumer detriments, so it was only asked to a sub-sample of the respondents (i.e. the individuals that experienced a detriment loss of more than 20 pounds). The sample of respondents was selected by moving around Great Britain with omnibuses. The locations were randomly chosen through a sampling methodology developed by TNS where sample frames and stratifications are constructed using census data on small area statistics for UK.

Related data sources

Consumer Detriment Survey for Ireland in 2008 (National consumer agency, 2008): this survey follows a similar approach as the aforementioned consumer detriment survey of UK, although mainly focusing on the home construction industry. Hence, we do not discuss this data source in further detail.

1.4.2.4 Survey on unfair commercial practices (UK, 2009)

The Survey of Unfair Commercial Practices of Great Britain provides data about the awareness of unfair commercial practices and the extent to which consumers experienced them within the last 2 years preceding the survey research conducted in spring 2009 (Bello, 2009; Collins, 2009).

Research questions

The overall research objective in designing this particular survey emerged as a response to the lacunae existing in the current consumer protection legislation of UK in force at that time. While the regulations protected consumers from unfair commercial practices (UCP) of businesses by sanctioning this latter group in case of misbehaviour, the legislation did not foresee any compensation for the (non-)financial loss of the mistreated consumer. Hence, this survey was conducted to collect empirical information on unfair commercial practices in Great Britain that could serve as compelling argument towards the government to initiate a civil right of redress for the victims of UCPs. Specifically, the survey was carried out to collect – among others – information on the prevalence of unfair commercial practices by type, their estimated financial costs, actions taken by consumers, complaining methods and satisfaction with complaints. Finally, it reflected on the attitude of consumers towards the introduction of a civil right of redress and consumers' propensity to sue in case of mistreatment.

Methodology

The survey was carried out by an online questionnaire and was directed to people of England, Scotland and Wales via an online invitation. The sample was selected from an online panel developed by an external company specialised in panellist. The analysis report of the survey was only based on the responses of consumers that actually experienced one or more unfair commercial practices during the last two years, restricting the sample to 1051 useful interviews. To ensure that the sample is representative and projectable for the entire population of Great Britain, propensity scores have been used to correct for a self-selection bias of individuals willing to answer online surveys, in combination with weights for social and demographic factors (e.g., age, gender, education and region).

Related data sources

AIM-CIAA survey on unfair commercial practices in Europe in 2009 (Dedicated Research, 2011): online questionnaire surveying 686 businesses in 15 European countries. In contrast to the aforementioned UK survey on UCPs directed towards individual consumers, this survey covers businesses' exposure to and experience with unfair commercial practices. The questionnaire includes questions on the type and amount of UCPs encountered by businesses as well as on their

actions taken for redress and their potential loss. We do not discuss this survey in further detail as it covers both manufacturers and retailers.

1.4.2.5 Survey on consumer fraud (US, 2011)

The survey on consumer fraud is a study commissioned by the Federal Trade Commission to provide empirical evidence on the occurrences and the type of consumer fraud experienced in the United States in 2011 (Anderson, 2013). Similar survey versions have been carried in the past for the years 2003 (Anderson, 2004) and 2005 (Anderson, 2007).

Research questions

A first round of questions is exploring to what extent respondents experienced consumer frauds in 2011 in absolute terms of incidences, by type of fraud, and by type of product. Responses of this first part are used to measure relative changes in the number of incidences compared to the previous survey of 2005. A second group of questions focus on the various means used in fraudulent transactions such as the ordering, the promotion, the purchasing channels and the payment methods. The survey also includes personal and demographic data, including aspects of consumer vulnerability in terms of willingness to take risk, financial obligations, self-control and numeric skills.

Methodology

The survey of 2011 was conducted through telephone interviews by using a sample methodology that randomly selects telephone numbers from the telephone listings. The sample methodology consists in subdividing the existing telephone listings in blocks of 100 telephone numbers having the same first eight digits and from which at least one is a residential number. This last criterion was added to avoid creating blocks of phone numbers that are exclusively allocated to businesses. The sample system selects a random block of phone numbers and allocates two random digits to the eight digits that define the block in order to obtain an existing phone number of ten digits.

1.4.2.6 Consumer sentinel network data book (US, 2007-2012)

The Consumer Sentinel Network (CSN) is an online database containing consumer complaints filed at various law enforcement institutions from US and Canada (Federal Trade Commission, 2013). This database is only accessible by law enforcement institutions and their partners and serves as a helpful tool to enhance and coordinate investigations among them. The CSN network initiative was launched in 1997 and contained more than 8 million consumer records in 2012. Only most recent complaints are withheld since all the records older than five years are purged out from the database on a regular base. Consumer complaints in the database are broadly divided in 30 categories, ranging from most common frauds (e.g. identity theft, debt collection) to least common ones (e.g. fraud in education or charity sector).

The richness of information in the CSN database provides insights into the prevalence of fraud and identity theft complaints across US States and Canada and allows for detailed statistical analyses. First it provides information about the number of consumer complaints that can be further disentangled by type of fraud, year and region. Second, it allows for a better understanding of the mechanisms of fraudulent transactions as complaints include information about the contact methods used by unscrupulous businesses. Third, the heterogeneity in vulnerability of consumers can be explored by linking the consumer characteristics mentioned in complaints (e.g. age and demographic information) to the likelihood of being a victim of consumer fraud. Fourth, annual collection of data allows for the analysis of relative changes in fraud occurrences over time.

Related data sources

- Consumer complaint survey in the USA (Consumer Federation of America, 2012): survey data on the prevalence of consumer complaints in the year 2011 has been collected by surveying local consumer protection agencies from 22 US states. Agencies are asked to provide information on the official complaints filed at their organizations, including the amount and category of complaints. In addition, agencies were asked to provide suggestions for new consumer legislations.

- Barometer of complaints (France, 2007): this database collects information on official complaints filed by consumers and professionals at consumer protection institutions, providing information by year, by sector and by type of purchase.¹⁰

1.4.2.7 National consumer survey (New Zealand, 2009)

The National Consumer Survey of New Zealand is a national survey commissioned by the Ministry of Consumer Affairs that was carried out in 2005 and 2009 (Ministry of Consumer Affairs, 2009). It aims at obtaining insightful and accurate information on consumers' knowledge, awareness and perception of, or experience with consumer legislations and consumers' problems before, after or during the transaction process of purchasing goods and services.

Research questions

The National Consumer Survey of New Zealand of 2009 builds upon the previous consumer survey conducted in 2005. The main objectives of the national consumer survey are threefold:

- To obtain relevant and accurate information of consumers' perception of and experience in the current market of New Zealand, enabling the Ministry to identify consumer aspects that should receive particular attention
- To establish an actual database on consumer conditions that can be used as benchmark to evaluate the effectiveness of future policy measures
- To provide relevant information helping the Ministry in reviewing consumer legislations

Specifically, the questions of the 2009 survey were designed to serve these research objectives. A first set of questions is dealing with people's awareness and understanding of current and future changes in consumer legislation in New Zealand. In addition, respondents are asked about their degree of confidence in consumer legislation. Furthermore, a second set of questions examines New Zealanders' awareness and use of information sources in case of a dispute. In the third part of the questionnaire, respondents are asked to what extent they are aware and make use

¹⁰ Only limited information was found on this survey, based on following website: [https://community.oecd.org/servlet/.../item11France\(Hugo_Hanne\).pdf](https://community.oecd.org/servlet/.../item11France(Hugo_Hanne).pdf).

of avenues for seeking redress. This part of the survey includes questions on consumers' reasons to seek for redress, the actions they undertake to solve actual problems, and their respondents' satisfaction rate of the resolution process and outcome. Another part of the survey investigates the sort of problems consumers (expect to) experience. Finally, the survey zooms in on two specific consumer problems related to financial scams, and problems respondents may encounter while seeking financial advice.

Methodology

Information for the survey was collected by 1000 face-to-face interviews. The respondents of the survey were randomly selected from the population of New Zealand's residents living in private dwellings and being aged 18 years or older. In order to obtain a nationally representative sample of New Zealanders, researchers followed a multi-stage sample design in which census data on household demography was used to define stratification levels. Subsequently small geographic units (called 'mesh blocks') were randomly selected within each strata. Within each mesh block random dwellings were selected from which a controlled walk would start in order to approach each n^{th} house for an interview. Finally, in each household approached, a person was randomly selected from the permanent residents being 18 years or older. In order to correct for potential biases due to household sizes (since persons in larger households have different probabilities of being selected than in smaller households), data was weighted with the probability of selection and with census data on age and gender.

1.4.3 Comparison between the current EC surveys and country-level surveys on consumer and business conditions

In this chapter we compare the current EC consumers' and retailers' surveys with other international surveys. Overall, we observe that the majority of these surveys aims to explore consumer conditions, while only a handful of them targets business conditions (i.e. from the retailers/providers' side). The issues tackled by the surveys can be grouped in three broad categories: 1) consumer legislations and market conditions, 2) unfair trading and consumer/retailer problems, and 3) detriments, complaints and redress. The first set of issues relates to the knowledge, awareness and trust that consumers have about the retailing environment with respect to legislation, information sourcing and problem solving. The second

aspect relates to compliance and enforcement of the measures of consumer protection with respect to experienced problems. Finally, the third issue addresses different types of consumer detriments, associated complaints and actions taken to solve them.

1.4.3.1 Consumer conditions

1.4.3.1.1 Consumer legislation and market conditions

Table 13 summarises the different issues on consumer legislation and market conditions that are covered in the EC consumers' survey and by other international surveys. The current EC consumers' survey includes several questions on consumer confidence and the knowledge and awareness of market conditions. Consumers' confidence in the trading environment is evaluated based on their trust in retailers, consumer organizations, and relevant public authorities (item 1.1.1). The survey also covers the consumers' perception on product safety (item 1.1.2). The awareness of consumer legislation is measured by consumers' knowledge of their rights when dealing with unsolicited products, defective goods, legal guarantees or cooling off periods (item 1.2.1). In addition, the EC consumers' survey incorporates questions on the easiness to resolve disputes through alternative dispute resolution (ADR) or through court (item 1.2.3). Questions are not only confined to national markets but cover also cross-border shopping. Hence, the survey captures the consumers' interest in shopping abroad and their awareness of where to get information about cross-border shopping in the EU (item 1.2.2). Finally, the survey incorporates additional issues on the impact of the media or the environment on consumer behaviour (item 1.2.4).

Some international surveys include supplementary parts related to these issues or take a different perspective in surveying them. First, besides surveying the degree of consumers' trust, the Australian consumer survey explores the reasons for the lack of consumers' confidence (item 1.1.1). Second, this survey disentangles the understanding of the consumer legislation and explores the phases during and after the purchasing process (item 1.2.1). Finally, the national consumer survey of New-Zealand and the Australian consumer survey explicitly inquire consumers on their knowledge and awareness of (alternative) dispute resolution. This includes questions on the knowledge about ADRs, their will to use them, or the reasons of their reluctance

to resolve their problems through ADR schemes. From a more general perspective it also investigates consumers' knowledge of the legal services that would hear a dispute and rule on it (item 1.2.3).

Table 13 Consumer conditions scoreboard vs international surveys - consumers' side: consumer legislation and market conditions

1. Consumer legislation and market conditions					
Item	Category	Eurobarometer 358 Survey 2012	Australian Consumer Survey (Consumers) 2011	NZ National Consumer Survey 2009	Swedish Consumer Market Survey 2012
1. Confidence					
1.1.1	Consumer perceptions of the institutional and market environment	Trust in public authorities, laws, sellers/providers and consumer organisations (Q1.1-Q1.4). Feeling confident to purchase via internet or in a foreign language (Q16, Q17.1). Interest in making cross-border shopping (Q17.3).	Confidence that businesses will not cheat (Q15); reasons for the lack of confidence (Q16); (Dis)agreement with various statements on business attitude and government help (Q17).	Consumers trust in protection laws; expectations of how often a certain problem could occur during a typical year.	Consumer trust in advertising, the retailer/provider and consumer protection by type of market.
1.1.2	Perception of product safety	Frequency of unsafe non-food and food products in the market (Q2 and Q3).			
2. Knowledge and awareness					
1.2.1	Knowledge of consumer legislation	Questions on specific situations (e.g. unsolicited products and cooling off periods (Q6-Q9)).	Awareness of existing laws (Q8,Q9); awareness of changes in or upcoming consumer laws (Q65, Q66). Understanding of consumer rights (general): during purchasing (Q7, Q10) and after (Q11); awareness of organisations responsible with consumer regulation (Q12-Q13).	Question on awareness of existing laws protecting customers. Quiz on ad-hoc situations to test consumers' understanding of the legislation and their rights.	Markets in which consumer rights are most clear.
1.2.2	Sources of information on market environment	Awareness of where to get information or advice about cross-border shopping in the EU (Q17.2).	Sources through which consumers became aware of consumer law (Q69). In case of mistreatment, when and where would consumers look for information or advice on consumer rights (Q18, Q20-Q23).	Awareness of organisations consumers could approach in search for information/advice on their rights.	
1.2.3	Awareness of alternative dispute resolution	Consumers who find it easy to resolve disputes through ADR or courts (Q1.5 and Q1.6).	Knowledge about ADRs, willingness to use ADRs, reasons for being unlikely to use ADRs (Q29-Q31).	Knowledge of the legal service that would hear the dispute and rule on it.	
1.2.4	Impact on consumer behavior	Consumer changed product or shop due to a story in the media (Q1.7) Shopping influenced by the environmental impact of goods and services; reasons for not being influenced (Q4 and Q5.2) If choice influenced by environmental impact, sources of information on those impacts (Q5.1)		Likelihood to purchase the goods/ services in the future from the same company again	

1.4.3.1.2 Unfair trading and consumer problems

The issues that are covered in the EC consumers' survey concerning unfair trading and consumer problems relate to 1) misleading, deceptive or fraudulent advertisements, and 2) consumer experiences with late or no delivery of goods and services. Examples of international surveys that focus specifically on unfair trading and consumer fraud include the US FTC Fraud survey and the Consumer Focus UK surveys (Table 14). The US FTC Fraud survey explores the prevalence of consumer frauds in the United States and surveys the characteristics of the transactions involving them. This survey finds that the most prevalent types of consumer fraud in the US are experienced with: weight-loss products, prize promotions, work-at-home programs, unauthorised invoices and credit card insurances.

The Consumer Focus UK survey on unfair commercial practices (UCP) analyses the extent of UCPs and explores respondents' experience with the enforcement regime that was in place at the time of the survey. The most common UCPs recognised by the respondents of the UK survey are: 'being a lucky winner', 'persistent sales calls', 'free products', 'limited offer' and 'closing down sale'.¹¹ Another survey conducted by Consumer Focus discussed before explores consumer detriments. The most frequent problems consumers of this survey encountered concern poor service quality, defective or damaged goods, being overcharged and delivery or repairing problems.

¹¹ More detailed information about unfair commercial practices can be found in chapter 1.2.

Table 14 Consumer conditions scoreboard vs international surveys - consumers' side: unfair trading and consumer problems

Eurobarometer 358 Survey 2012	Australian Consumer Survey (Consumers) 2011	US Survey on Consumer Fraud 2011	UK Survey on Unfair Commercial Practices 2009	UK Consumer Detriment Survey 2012
<p>Consumer came across misleading/deceptive/ fraudulent advertisements (Q19)</p> <p>Consumers experience a late or no delivery of purchased products or services (Q15).</p>	<p>Problems experienced in the last two year by sector, region (Q32) and category (Q35-Q40)</p> <p>Frequency of problems experienced in last two years (Q14, Q33)</p>	<p>Surveys the prevalence of consumer frauds and the characteristics of transactions related to them.</p> <p>The most prevalent surveyed frauds are:</p> <ul style="list-style-type: none"> - Weight-Loss products - Prize promotions - Work-at-home programs - Unauthorized billing - Credit card insurance - Credit repair 	<p>UCPs surveyed:</p> <ul style="list-style-type: none"> - Trader simulating his identity - Offer must end Monday - Miracle products - Fake goods - Closing down sale - Targeting children - Pyramid selling - Absolutely free - Being the lucky winner - Intimidation - Persistent sales calls 	<p>Problems experienced in the last year by sector, category, shopping channel used and type of purchase (individually or in group). Frequency of problems experienced in the last year.</p> <p>UCPs surveyed:</p> <ul style="list-style-type: none"> - Problems related to misleading or incorrect information - Offers of inadequate redress (financial and non-financial) - Problems related to unfair or unclear contract terms - Claims related to pricing of good or services - Questionable selling methods (e.g. pyramid selling, inertia selling) - Being sold products you do not agree to/or for which you are not eligible - Being put under pressure to buy <p>Consumer problems surveyed:</p> <ul style="list-style-type: none"> - Problems related to product or service safety - Problems pursuing a claim - Problems with (or arising during) the guarantee period - Defective, faulty or damaged goods or services - Lack in service quality - Problems in collection, delivery or repairing

1.4.3.1.3 Consumer detriment, complaints and redress

The third aspect of consumer conditions addresses issues related to consumer detriment, complaints and potential methods for redress (Table 15). The EC consumers' survey includes several questions to capture these issues. A first question asks respondents whether they had a legitimate reason to complain in the last two years (item 3.2.1). Second, the survey explores consumers' actions taken, their satisfaction about the complaint handling (item 3.2.3) and their reasons for not taking any action.

The national consumer surveys of Australia and New-Zealand and the consumer detriment survey of UK also address issues on the sources of information for advice and the degree of satisfaction about the information and advice received (item 3.2.4). In addition, the latter survey collects information about the organizations or institutions that were contacted by consumers in search for redress, the channels that were used to contact them and the extent to which consumers found them helpful.

Furthermore, these surveys also tackle issues about the status of the resolution process, the reasons of not having a problem solved (item 3.2.3). An additional issue tackled by the Australian consumer survey concerns consumers' likelihood to make a complaint in case of mistreatment and the circumstances in which consumers would be more likely to complain (item 3.2.2).

Table 15 Consumer conditions scoreboard vs international surveys - consumers' side: consumer detriments, complaints and redress

3. Consumer Detriment, Complaints and Redress					
Item	Category	Eurobarometer 358 Survey 2012	Australian Consumer Survey (Consumers) 2011	UK Consumer Detriment Survey 2012	Similar surveys
1. Consumer detriment					
3.1.1	Extent of detriment			Financial detriment: average cost of detriment per category of problem; type of cost. Non-financial detriment: Time spent dealing with the problem (by category of product/service); emotional impact.	- NZ National Consumer Survey 2009 (with specific focus on financial scams)
2. Complaints and redress					
3.2.1	Complaint handling and actions taken	Consumers that had a legitimate cause for complaint in the last year (Q10), their actions taken (Q11) with reasons for not taking any action (Q13).	Actions taken when experiencing a problem (Q44, Q46, Q47, Q54-Q55); reasons for not taking any action (Q45)	Actions taken when experiencing a problem, by category of product/service and in which way (e.g. telephone,...). How much time spent in redressing the problem.	- Swedish Consumer Market Survey - NZ National Consumer Survey 2009
3.2.2	Likelihood of complaining and contact choice		Likelihood to make a complaint if misled by a business; reasons for not making a complaint; circumstances when consumer would make a complaint and organisations they would contact (Q24-Q28).		
3.2.3	Satisfaction about complaint handling	Degree of satisfaction about complaint handling (Q12).	Was the problem solved? (Q56); If no: reasons for not having it solved (Q57); If yes, methods of solving it (Q58). Which organisation provided dispute resolution and how helpful it was (Q61 and Q62).	Degree of satisfaction about complaint handling. Was the problem solved? Resolution expectation for problems not yet solved; intention to pursue problems not yet solved; likelihood to succeed.	- NZ National Consumer Survey 2009
3.2.4	Sources of information or advice used to solve a problem		Sources of information/advice (Q48), how easy it is to find them (Q49). Degree of satisfaction of nformation/advice received from state regulator/consumer organisation/ business (Q51-Q53).	Consumers that contacted an institution to obtain advice on how to proceed. Third party organisations contacted. How did the company behave when contacted ? (acknowledged the problem, easy to contact etc). Which actions were taken by the company.	- NZ National Consumer Survey 2009

1.4.3.1.4 Consumer characteristics

Another key aspect to understand consumer conditions is to identify the heterogeneity within the group of consumers. For instance, some types of consumers may be more vulnerable than others to fraudulent, deceptive or misleading commercial practices. As such, it is important to include questions about the respondents' demographic characteristics in order to disentangle potential differences in consumer vulnerability. The EC consumers' survey includes a demographic category in which following components are captured: age, gender, nationality, and education level.

In order to gain more detailed insights on consumers' vulnerability one can expand the survey - in the same vein as the US survey on consumer fraud - by exploring the respondents' risk adversity, the ease to pay their current debts, their level of patience and self-control, their numerical skills and their expected income in the future. Other surveys as the UK survey on UCPs directly ask respondents whether they felt vulnerable due to age, health problems, poor financial circumstances or other personal issues. The various components on consumer characteristics and demographics extracted from existing surveys that could expand the current EC survey are summarised in Table 16. Regarding item 7 on the financial situation, it may also be appropriate to collect the current income of consumers.

Table 16 Consumer vulnerability

Item	Characteristics of respondent	US Survey on Consumer Fraud 2011	UK Survey on unfair commercial practices 2009
1	Race and ethnicity	X	
2	Willingness to take risks	X	
3	Experienced a serious negative life event	X	
4	Ease of current level of debt	X	
5	Level of patience/self-control	X	
6	Numeric skills	X	
7	Expected future income	X	
8	Self-identification of vulnerability due to age, health problems, poor financial circumstances or other personal issues		X

1.4.3.2 Business conditions

The Consumer Conditions Scoreboard also reflects the perspective of retailers, as revealed by the data collected through the EC retailers' survey.¹² The only international survey discussed in this report exploring similar issues is the Australian survey of businesses. In this chapter we summarise all issues captured by the EC retailers' survey and compare them with the Australian business survey.¹³ We start by comparing the methodologies used in both surveys.

1.4.3.2.1 Methodology of business conditions surveys

The Flash Eurobarometer 359 survey used for the 9th edition of the Consumer Conditions Scoreboard has been carried in September-October 2012 and includes the responses of 10060 company interviews across the 28 EU Member States, Norway and Iceland. The targeted companies cover “retailers that sell goods or services directly to end consumers that employ at least 10 people” (European Commission, 2013b, p. 4), “selling to final consumers in the retail and service sectors in the European Union (NACE: G, H, I, J, K, excluding G 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles; J 67 Activities auxiliary to financial intermediation; K73 Research and development; K74 Other business activities)” (European Commission, 2013b, p. 137). The NACE codes correspond to: “Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles” (sector G), “Transportation and Storage” (sector H), “Accommodation and Food Services” (sector I), “Information and Communication” (sector J), and “Financial and insurance activities” (sector K). Responses were collected by TNS Political & Social using telephone interviews. The list of companies qualified to be interviewed was developed by Bureau Van Dijk and Dun and Bradstreet, which compile large scale firm-level database of the target countries.

¹² As for the consumers' EC surveys, also retailers' responses are collected through a questionnaire. While most of the questions specify that the answers concern the retail company and not the point of view (or opinion) of the retailer respondents from a consumer perspective, some questions may be misleading. The EB 359 questions that may be liable to misinterpretation are about product safety (Q11), compliance with consumer legislation (Q14), and knowledge about ADR schemes (Q15).

¹³ We could identify two other reports about business conditions. As previously mentioned, the AIM-CIAA survey collects information on unfair commercial practices in Europe by questioning businesses in 15 European countries. We do not further discuss this survey as it includes both manufacturers and retailers in the sample. A second report explores the commonly recognised UCPs across Member States, but from a business-to-business perspective.

A similar methodology was used for the Australian survey on business conditions. It was conducted in March 2011, and was also carried out by telephone. The sample of companies was randomly selected from an electronic business directory, and total of 1210 surveys were collected. The survey excludes several industries from the business sample (e.g. mining, agricultural, forestry and fishing industries, non-profit and government organisations).

Both surveys employ various quotas, in order to ensure that samples are representative of the population of firms. The EC retailers' survey employs quotas for companies' size and sectors, while the Australian survey also includes quotas for the State/Territory of the firms. Companies from a larger size or with a larger market share have probably a higher impact on consumers than companies with a smaller scale. Therefore, weights are constructed to obtain national estimations of the survey responses, and can be used to control for the differences of companies' impact on consumers' conditions. The EC survey provides detailed descriptive statistics of these weights in the Technical Specification part of the report (European Commission, 2013b, p. 137-141), while the weighting statistics of the Australian survey are presented in appendix of the report (Commonwealth of Australia, 2011). This last report had a response rate of 14.8%, but they do not correct for non-response biases.

The EC retailers' survey does not include micro-enterprises in the sample, in contrast to the Australian survey. Micro-enterprises should meet at least two of the three following criteria: 1) having fewer than 10 employees, 2) reporting a balance sheet of less than 2 million euro and 3) having a turnover below 2 million euro. The inclusion of micro-enterprises in the survey should be duly considered given their considerable impact. The annual report on European small- and medium-sized enterprises shows that the share of micro-enterprises in the EU employment reached 28%, and their share in gross value added is close to 21% (European Commission, 2013c).

According to the report, the wholesale and retail sector (sector G) includes 5.78 million SMEs - 93% of them had less than 10 employees. The share of micro-enterprises in sector G of the EU employment sets around 36%, and their share of gross value added raises to roughly 25%. Shares of micro-enterprises in the EU employment in sector H, I and J are respectively 19%, 41% and

21%.¹⁴ Their shares of gross value added in these sectors are respectively 12%, 36% and 10% (European Commission, 2013c). We provide a more detailed analysis of the sample structure of the consumer and retailer surveys in chapter 2.4, containing also some reflections on the inclusion of micro-enterprises.

1.4.3.2.2 Consumer legislation and market conditions

The various issues related to the consumer legislation and market conditions are presented in Table 17. First, the EC surveys the retailers' trust of competitors' claims on the environmental impact of products and services (item 1.1.1) and their perception on food/non-food product safety (item 1.1.2). To test the retailers' knowledge and awareness of consumer legislation, the EC retailers' survey uses questions about ad-hoc situations asking whether specific retailers' actions are allowed by law or not (item 1.2.1). In the same line as the survey on consumers, the EC retailers' survey has a wide range of questions tackling the interest for cross-border selling and the possible obstacles that impede the development of cross-border sales (item 1.2.2).

Businesses are also enquired on their awareness where to get information and advice about consumer legislation (item 1.2.3). Furthermore the survey includes questions on businesses' knowledge and use of one or more alternative dispute resolution method and on their perception of the impact of consumer legislation, i.e. whether public organizations actively monitor and enforce consumer legislation (item 1.2.5). Finally, the EC retailers' survey focuses on the retailers' perception on the role of the media reporting on consumer issues (item 1.2.7).

The Australian survey adopts a similar approach and investigates comparable issues on the knowledge and awareness of business' conditions before, during and after the selling process. In addition, this latter survey expands the questionnaire by exploring the businesses' opinion on the benefits of consumer legislation (e.g. consumer protection, removal of unfair competition, opportunity to resolve issues) and on the limitations it may involve, i.e. resulting in too many restrictions, too much paperwork and costs (item 1.2.1). Other aspects reported in this survey

¹⁴ The report on SMEs in Europe does not contain statistics of micro-enterprises of sector K (European Commission, 2013c). The report does also not contain exclusions of sector applied in the EC retailers' survey (Eurobarometer 359).

relate to the retailers' knowledge of organizations responsible for enforcing consumer legislation, their awareness of regulations and law on fair trading (item 1.2.3). In addition, the survey explores whether retailers inform their customers about their rights when purchasing a product or service and how this information is provided (item 1.2.4). Finally, retailers are asked how much impact they think (new) consumer legislation would have on their business (item 1.2.6).

Table 17 Consumer conditions scoreboard vs international surveys - retailers' side: consumer legislation and market conditions

1. Consumer legislation and market conditions			
Item	Category	Eurobarometer 359 Survey 2012	Australian Consumer Survey (Consumers) 2011
1. Confidence			
1.1.1	Trust in competitors - environmental impacts	Retailers who trust their competitors' claims on environmental impacts of products and services (Q10).	
1.1.2	Perception of product safety	Retailers who think a significant number of food/ non-food products are unsafe (Q11, Q12).	
2. Knowledge and awareness			
1.2.1	Knowledge of consumer legislation	Quiz on various aspects of consumer legislation (Q5, Q6, Q7).	<p>Awareness and understanding of legal obligations (list of issues) before, during and after the selling process (Q1, Q3, Q4a, Q4b, Q5a, c, Q52); awareness of changes in or upcoming consumer laws (Q20-Q23).</p> <p>Business' opinion on the benefits of consumer legislation (e.g. consumer protection, removal of unfair competition, opportunity to resolve issues) (Q25) Limitations may include, among others: too many restrictions, too much paperwork, not enough information, costs involved (Q26).</p> <p>Awareness of laws and regulations on fair trading the business is required to comply with (Q2).</p>
1.2.2	Obstacles for cross-border shopping	Importance of obstacles in the development of cross-border sales in other EU countries (e.g. national tax regulations, compliance to consumer regulation) (Q1). Interest in selling cross-border (Q2).	
1.2.3	Sources of information	Awareness where to get information and advice about the consumer legislation (Q4)	<p>Which organisations do retailers know (from a list) (Q6, Q7, Q4).</p> <p>Sources of information and advice about fair trading and consumer protection (Q9, Q10); preferred method of receiving information about new legislation (Q38).</p>
1.2.4	Information provided to customers		Does the business inform consumers about their rights when purchasing a product / service (Q16); how is this information provided (Q17).
1.2.5	Knowledge of dispute resolution mechanism	Retailers who know one or more alternative dispute resolution (ADR) methods (Q15).	Awareness of dispute resolution services (Q11).
1.2.6	Impact of consumer legislation		Businesses are asked about the impact (positive, negative, none) of consumer legislation on various aspects such as: business awareness and compliance, consumers' awareness. Investments of resources required by compliance etc (Q35, Q36).
1.2.7	Perception on media	Retailers who think media report regularly on consumer issues (Q14.6).	

1.4.3.2.3 Unfair trading and retailer problems

The unfair trading and other problems (Table 18) with respect to consumer legislation from the business perspective are explored in the EC survey about retailers' experiences of misleading, deceptive or fraudulent advertisements of competitors (item 2.1) and their experience and perception of active enforcement and market surveillance by public authorities (item 2.2). The EC survey also explores retailers' (or competitors') compliance with consumer legislation (item 2.2). Compared with the EC survey, the Australian one incorporates more general questions on the business perception of consumer legislation and regulation (such as possible consequences for businesses that do not comply, the role of the media, dispute resolution). In addition, it analyses the changes made by businesses in order to comply with consumer legislation (item 2.3).

Retailers' complaints and redress

Finally, issues on the participation of businesses in the process of resolving consumer complaints are rather scarce either in the EC retailers' survey or in the Australian survey. The former survey focuses on retailers' experiences with alternative dispute resolution (item 3.1). The Australian survey includes some additional questions on dispute resolution, related to the retailers' likelihood to participate in a third party resolution dispute and their reasons of being unlikely to participate in them.

Table 18 Consumer conditions scoreboard vs international surveys - retailers' side: problems and complaints

Unfair trading and retailer problems

Item	Category	Eurobarometer 359 Survey 2012	Australian Consumer Survey (Consumers) 2011
2.1	Misleading/deceptive advertisements	Retailers who came across misleading, deceptive or fraudulent advertisements of competitors (Q8, Q9).	
2.2	Enforcement and market surveillance	Retailers who think public and other regulation authorities actively monitor and enforce consumer legislation (Q14). Retailers who experienced active enforcement by public authorities related to non-food safety (Q13).	More general questions on the perception of consumer regulation (e.g. possible consequences for businesses that do not comply, the role of the media, dispute resolution) (Q8).
2.3	Compliance	Retailers are asked whether they (or their competitors) comply with consumer legislation (Q3)	
2.4	Changes required by compliance		Change made by the business in order to comply with consumer legislation (Q39 and Q40).

Complaints and redress

Item	Category	Eurobarometer 359 Survey 2012	Australian Consumer Survey (Consumers) 2011
3.1	Dispute resolution	Retailers who have used ADR mechanisms in the past 2 years (Q16).	Participation in a third party resolution dispute (Q12); opinion on the effectiveness of the service used (Q13); intention to use it in the future (Q14); reasons for not using it in the future (Q15).
3.2	Media impacts	Other issues such as "Impacts on retailers' behaviour" (Q14.7).	

1.4.3.2.4 Limitations of the Eurobarometer 359 survey

The Eurobarometer 359 survey on retailers counts several drawbacks and limitations in terms of interviewing method, sampling criteria, and target population. In this chapter we critically assess them.

Interviewing method

The Eurobarometer 359 surveys are conducted by means of CATI techniques, i.e. computer-assisted telephone interviewing. One of the main disadvantages of this method is that it is performed in real time. Hence, respondents do not have time to search for the answer. This drawback could be solved by surveying retailers by mail. In this case, a Total Design Method (i.e. TDM) developed by Dillman (1978) could be used to maximise the response rate. The TDM was originally used for individual and household surveys, and later adapted to business environments by Dillman (2000) and Moore and Baxter (1993). The TDM consists of a combination of actions to reduce the non-response rate, including several contact points with the respondents. As such, the questionnaire should be announced by a pre-notice letter before being sent out. After receiving the completed questionnaire, a thank you postcard should be sent, while non-respondents should be contacted again by means of a remind letter or a telephone follow-up. This method is highly effective in obtaining good response rates, but its operational costs are rather high. Hence, from a budget perspective, CATI techniques may be more affordable. If the CATI methods are endorsed, it is important to guarantee that the survey is addressed to respondents with the same position in the company (e.g. sales manager). Since in practice it is not always feasible to obtain interviews from same profile functions, the 10th edition of the retailer survey includes a question on the position of the respondent and distinguishes between following categories: general manager, commercial/sales manager, marketing manager and other. The first three categories are respondents with leading positions and decision making responsibilities, therefore with presumably better abilities to answer the questions. A first way to determine whether results are biased by the heterogeneity of respondents' profile is to explore different answering patterns between the groups. This can be investigated through ANOVA analyses in which the averages of variables are compared between the groups. In case significant differences are found among the groups, survey results would be suffering from a response bias.

However, even if any bias is observed, there is no distinct way to correct for it as one cannot ascertain the direction of the bias.

Measurement errors may be also due to the sensitivity or the complexity of the questions in the survey. While most of the respondents will probably know the number of employees in their company, a lower share of them will know the turnover of the previous year. Hence, in the 10th edition of the EC retailer survey, almost 4000 respondents out of 11000 replies did not to know the turnover, while only 4 observations are missing for the number of employees. In addition to that, given the complexity of this question part of the respondents that answered may have provided an approximate answer (which may be even far from reality) eventually resulting in measurement errors. Similar arguments hold for the questions on the channels through which companies received complaints, the type of complaints, occurrences of unfair commercial practices and the perception on compliance. Due to the complex nature of these questions, many respondents ignoring the answers may just give a guess.

Moreover, several questions can be misinterpreted by the retailers and answered from a consumer perspective rather than from a company perspective. Questions about the products' safety (Q4), the commercial guarantee of products (Q5), the knowledge of legislation about commercial practices (Q6), the perception of compliance (Q8 and Q11), and the knowledge of alternative dispute resolution (ADR) bodies (Q13) can potentially be answered from the personal knowledge / perception of the respondent rather than from a perspective of the company itself. This can lead to further measurement errors for which cannot be corrected for.

Target population and sampling

The appendix on technical specifications of the Flash Eurobarometer 359 report (European Commission, 2013b) provides some information on the sampling and on the weighting method used to process the survey. The target population of the 9th edition of the Eurobarometer 359 survey on retailers includes both retailers of goods and providers of services, and it covers “businesses selling to final consumers in the retail and service sectors employing 10 or more persons in the European Union (NACE: G, H, I, J, K, excluding G 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles; J 67 Activities auxiliary to

financial intermediation; K73 Research and development; K74 Other business activities).” (European Commission, 2013b, p. 138). The explanations provided by the technical appendix about the sampling method are rather poor and vague. We advise the Consumers Directorate of DG Justice and Consumers to ask for additional details and extended clarifications on how sampling and weights have been constructed. From the technical appendix we understand that the target population of business was first obtained from national databases of Bureau Van Dijk and Dun and Bradstreet and subsequently divided into mutually-exclusive subgroups based on both company size (from 10-49 employees, 50-249 employees and more than 250 employees) and sectors (trade and services). At this stage quotas representing the proportions of each subgroup in the population are applied to each of these sub-groups in the sample. However, the technical appendix does not provide detailed definitions, or descriptive statistics, or mathematical calculations of how the quotas are defined.

In order to investigate the reliability of the sample structure of the 10th edition of the EC retailer survey, we compare the sample distribution of the survey with population data from the European SMEs database (DG ENTR 2013a) for a selected number of sectors (see chapter 2.4). Comparisons are made for weighted and unweighted survey data and population data on 1) the number of enterprises in eight selected sectors and 2) the type of firms in terms of employment size. Overall, the analyses reveal large divergences for several countries between the survey sample and the population distribution. While some sub-groups appear to be underrepresented in the sample, others are largely overrepresented. Hence, the sampling method does not provide a reliable reflection of the business population within these sectors. Ideally the sample design should reflect the principles that inform the methodology followed by the National Consumer Survey of New Zealand (Ministry of Consumer Affairs, 2009, p. 13).

In addition to measurement errors stemming from the interviewing method and the sample design, the survey may also suffer from non-response biases. This occurs when the answers of respondents differ significantly from the potential answers of individuals who did not participate to the survey. First, efforts should be made to minimise the occurrence of non-responses. As mentioned earlier, this can be obtained by using more complete interview methods such as the Total Design Method (Dillman, 2000). Second, the weighting factors should allow correcting for

non-response biases. This can be done by conducting a non-response survey for companies that do not want to participate to the complete questionnaire. Instead of answering to a questionnaire of 30 minutes, these firms can be solicited to answer to a reduced survey of some main questions that would only last a couple of minutes. This reduced survey can contain some firm specific questions (e.g. employees, turnover, online selling) and one question on consumer conditions (e.g. knowledge on consumer legislation, Q6). Information of this non-response survey can then be used to reduce eventual bias in the estimates by adjusting the weighting factors. We refer to the appendix of the US survey on consumer fraud report for a more detailed explanation on how they solved for the non-response bias (Anderson, 2013, p. C-1)

The survey displays also problems of reliability and efficient use of financial resources due to the fact that several questions of the questionnaire are more applicable for retailers of goods than for providers of services (e.g. issues related to cross-border sales, product safety and guarantee). Filter questions are used to disentangle target populations when needed. To overcome the loss of observations caused by filter questions two distinct questionnaires for retailer trades and services can be created. As such both questionnaires could be adjusted to the target population and focus on more specific questions.

Overall, we observe that the EC retailer survey suffers from several limitations related to the interview method, the sampling design and the target population. These limitations can lead to significant measurement errors and therefore make the results of the survey unreliable. Since many of these drawbacks cannot be easily solved and given the large financial resources used to conduct this survey, it may be advisable to discontinue the retailer EC survey.

1.4.4 Conclusions

In this chapter, we provide an overview of existing surveys collecting information on consumer and business conditions before, during and after commercial transactions of goods and services. The purpose is to identify the various issues that are commonly dealt with in worldwide databases and to compare them with those analysed in the EC surveys. The overview on consumer conditions contains surveys from Australia, Sweden, New Zealand, United Kingdom and the United States. Surveys analysing retailer conditions remains more limited, since –

besides the EC retailers' survey - we could only identify one relevant survey from Australia. We found these surveys through google search of English keywords. We repeated the same exercise in Dutch, French, German, and Italian but no other relevant surveys were identified through it.

The overviewed databases diverge in two main aspects from the EC surveys. First, in contrast to the EC surveys that are conducted on EU-wide scale, the analysed surveys are confined at country level. Second, the EC surveys vary also in terms of the scale of analysis compared to the other worldwide surveys. While the EC surveys aim at exploring consumer issues from a more general perspective, some country level surveys conduct more in-depth analyses addressing particular aspects of consumer conditions (e.g. focusing on unfair commercial practices or consumer frauds). To conclude, the comparison of the EC surveys with other existing databases provides fruitful ideas and suggestions for a revision of the conceptual framework of the EU scoreboard. Hence, the scoreboard could be complemented with more detailed information on consumer characteristics in line with the US survey on consumer fraud and the UK survey on unfair commercial practices. Suggestions for further extension of the scoreboard include issues on sources of information for problem resolution (e.g. Australian consumer survey) and consumer detriments (UK detriment survey). These items are not yet included in the questionnaire of the EC retailers' surveys of 2014 but they could be included in upcoming years.

Eventually, we reflect on the limitations and drawbacks of the EC retailers' survey about the interviewing method, the sampling design, and the target population. We observe that most of the shortcomings of this survey are not easily solved. Therefore, we advise to reflect on discontinuing this survey in order to free financial resources for more efficient studies on consumer conditions.

1.5 An updated framework for measuring consumer conditions in the European Union

Violeta Piculescu and Vincent Van Roy

This chapter introduces the updated framework for measuring consumer conditions in Europe that reshapes the existing EC Scoreboard for Consumer Conditions in order to further enhance its methodological robustness. It builds on the review of the economic theory of consumer decision making, the legislative framework for the EU consumer policy, the country-level consumer surveys worldwide, and on the statistical audit of the Consumer Condition Index.

1.5.1 Introduction

The Consumer Conditions Scoreboard currently in use by the European Commission relies primarily on survey data that elicit the perceptions and experiences of EU consumers and retailers with respect to regulatory, market and institutional conditions of domestic and cross-border trading. The objective of the Scoreboard is to provide a summarizing picture of two main aspects of consumer environment in Europe: the degree of integration of the retail single market, and the protection and conditions afforded to consumers in each Member State. The Scoreboard features elements of consumer protection common to all EU countries and, when compared with similar existing surveys, it has several advantages. First, it reflects perceptions and experiences from both ends of a transaction: consumers and retailers. Second, it provides comparable data at country level for all EU Member States. And third, it also aims at measuring the degree of integration of the Single Market from the consumption perspective. Overall, the Consumer Conditions Scoreboard constitutes a useful policy instrument that helps monitor and compare trends in consumer conditions in EU Member States.

Ongoing economic, societal and regulatory challenges with respect to the protection of European consumers, however, call for a renewed focus on the measurement of consumer conditions across EU countries. From the perspective of policy monitoring, these dynamics require a flexible measurement tool that can be adapted regularly to most recent challenges, while still preserving its monitoring role over a longer period of time. In the current chapter, we present the updated framework of the EC scoreboard, a framework that enables the implementation of such a tool for the measurement of general consumer conditions.

The structure of the chapter is the following. We first introduce the broad structure of the updated framework for measuring consumer conditions in the EU and continue with a discussion of the issues that are included in each of its dimensions. We discuss both the items that are included in the updated EC survey questionnaires for consumers and retailers, and additional topics that could be addressed in future waves. The final EC surveys on retailers and consumers for the new edition of the Consumer Conditions Scoreboard are presented in appendix. The chapter concludes with considerations on avenues of analysis based on this measurement strategy.

1.5.2 Framework structure

We introduce an updated framework for measuring consumer conditions in the EU that combines two main features: continuous monitoring of core issues coupled with flexible updating for recent developments. This implies a framework that consists of two components: 1) a core component of consumer issues that are measured repeatedly and can be used for the analysis of trends in consumer conditions across several periods, and 2) a flexible component (module) that includes a limited number of new issues adapted to most recent developments in the markets, and which can be used for the spot analysis of selected issues of policy interest during the current period.

In designing the framework, we start from the structure of the current EC Consumer Conditions Scoreboard (the 9th edition) and adjust it based on recent developments in the regulatory repository for consumer protection in the EU, and on the cumulated international experience in the field. The net result is a framework that includes many of the conceptual elements of the current Scoreboard primarily in its core component, and new categories of issues included both in the core and the flexible components.

The four main criteria used to define the issues selected for measurement address the empirical challenges of the current Scoreboard: 1) the correspondence between the cross-border and domestic coordinates of the EU single market, 2) the symmetry of issues analysed for consumers and businesses, 3) the specific challenges of the online trading environment and other recent market and regulatory developments, 4) the heterogeneity of consumers with respect to their

trading capabilities and experiences. We use these criteria systematically in order to determine the categories of issues that are to be considered for the measurement of the various dimensions of consumer conditions both at country level and across the EU.

First, the correspondence between cross-border and domestic dimensions of business to consumer trade within the EU serves to assess the differences in trading attitudes and experiences in cross border transactions relative to attitudes and experiences of market participants in domestic transactions, and it enables an analysis of the integration of the EU common market over time. This criterion implies a systematic measurement of similar aspects for domestic and cross-border transactions whenever relevant for the analysis of the single market.

Second, by symmetric measurements of consumer issues we mean measuring the same issues for consumers and retailers, as relevant. Given that views and experiences of the two types of trading partners are likely to cross-validate and also complement each other, preserving this symmetry helps achieve a more reliable framework of measurement. Further, measuring similar issues for consumers and retailers also offers the possibility to determine the differences in assessment between the two types of market participants.

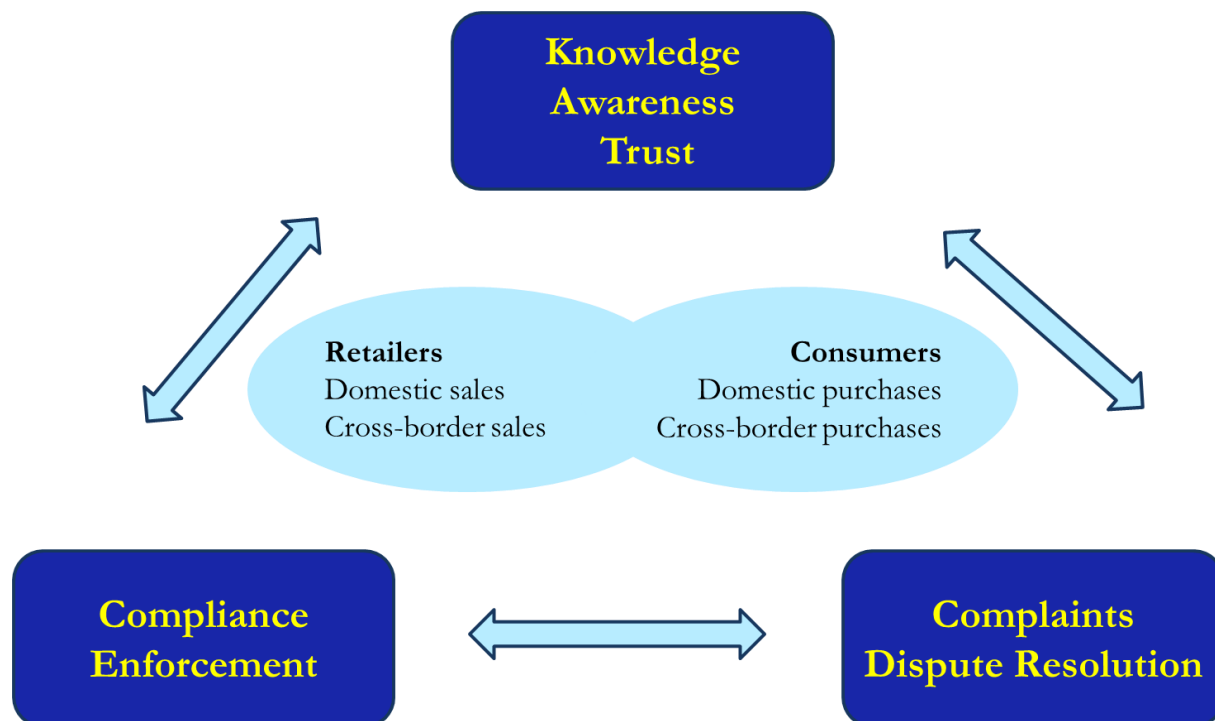
The third criterion focuses on updates with respect to the most recent market and regulatory developments. For the purpose of this report, its application is reflected by the inclusion of new elements in the core component of the measurement framework, and in the flexible modules that can be implemented at later stages, over time. More generally, however, the criterion is meant to serve as a guiding principle for the regular updating of the flexible component of the framework.

Finally, the fourth criterion on individual heterogeneity serves to expand the set of characteristics that are to be measured for individual consumers in order to enable the analysis of more vulnerable consumers. The heterogeneity of socio-demographic characteristics, capabilities and experiences of consumers is likely to play a significant role in shaping their perceptions, attitudes, and experiences. The answer of a consumer on low prevalence of a given unfair trading practices, for example, may be due to a genuine absence of that practice from the market, but it

may also be driven by the consumer's limited exposure to the retail channel used to promote that practice, or by his limited ability to recognize the unfairness of that practice. Such factors are rather difficult to disentangle empirically in a direct manner, and therefore call for a strategy of empirical identification.

The framework is designed along three main dimensions: 1) knowledge, awareness and trust with respect to consumer legislation and market conditions, 2) compliance with consumer legislation and enforcement, and 3) consumer complaints and resolution of disputes between consumers and retailers. These dimensions follow the logic of the three main stages of a transaction (before, during, and after) between a consumer and a retailer and, as illustrated in Figure 11 below, they are to be measured along two main axes of analysis: market participant (consumer or retailer) and trading location (domestic or cross-border in the EU).

Figure 11 Framework for measuring consumer conditions



The main features of the three dimensions are the following. In the first dimension we group issues that reflect the knowledge of consumers and businesses with respect to consumer rights and trading practices, their trust in institutional actors relevant in field, their confidence in market conditions and their perceptions of mechanisms for dispute resolution. The second dimension focuses on issues of compliance and enforcement as reflected by consumers' experiences with problems and unfair trading practices in the market, and the experiences of retailers with respect to compliance with consumer regulations and enforcement measures. The third dimension reflects direct experiences with consumer complaints for both consumers and retailers.

The value added of this framework is twofold: conceptual and methodological. From the conceptual perspective, it is adapted to the most recent changes in consumer regulations in terms of the expansion of online trade and the protection of consumers against unfair commercial practices. The framework is geared also towards an in-depth analysis of consumer empowerment, consumer vulnerability, and alternative mechanisms of conflict resolution available to consumers and businesses in Member States. An additional advantage is also the possibility to address new issues in line with current policy priorities. From the methodological point of view, on the other hand, we strive to reduce the dimensionality of the framework in order to enable a more synthetic analysis of consumer conditions in the EU Member States across time.

1.5.3 Summarising dimensions of consumer conditions

The main sources of data for the EC Scoreboard of conditions are the surveys of consumers and retailers mentioned in chapter 1.4. These surveys are used to collect periodically data on consumer conditions, thus enabling the analysis of trends in these conditions in all Member States over time. In order to keep the length of the survey questionnaires manageable, the framework of measurement of consumer conditions is structured in two main components: a core component, which is to be repeated in each survey wave in order to allow for the analysis of trends in consumer conditions over time, and an ad-hoc (flexible) component, which is to be adjusted in each wave based on current policy priorities and market developments. Thus, the flexible component will enable a more detailed account of specific issues of current interest. In

the following chapters, we introduce the core and flexible components for the three dimensions of the framework, first for domestic transactions, and subsequently for cross-border transactions.

1.5.3.1 Dimension 1: knowledge, awareness and trust

With respect to domestic transactions, the objective of the first dimension is to measure the extent to which consumers are informed with respect to their rights, confident in the products offered in the marketplace, confident with respect to the shopping environments, including online, and confident in mechanisms for solving disputes with retailers (including courts and ADR bodies). Additional issues that could be addressed in the ad-hoc modules include sources of information on consumer issues and products offered in the market, consumer education, knowledge of consumer organisations or public agencies/ authorities dealing with consumer issues, e-commerce, and awareness of national small claims procedures (if applicable). On the retailers' side, the dimension includes similar measures: the extent to which retailers are informed with respect to consumer legislation, confident in the safety of products offered in their sector, interested and confident to sell online, and aware of and willing to use alternative dispute resolution schemes in their country. The flexible component for retailers includes sources of information on consumer issues, market information on products, and e-commerce. These items are presented in Table 19. The question numbers in parentheses refer to the items in the updated questionnaires for the EC surveys (left panel – survey of consumers, and right panel – survey of retailers). All survey questions are included by dimension in Table 65 and Table 66 in appendix. The final questionnaires are in appendix as well.

1.5.3.1.1 Consumers - domestic transactions

For domestic transactions, the core items included for consumers correspond largely to items already existing in the current EC Scoreboard for consumer conditions. The knowledge component includes three questions that check respondents' knowledge of conditions for

reflection periods and the right to withdraw from a distance contract, legal guarantees and the right of no response in case of receiving unsolicited products (Q6-Q8).¹⁵

Table 19 Knowledge, awareness, and trust - (domestic transactions)

Consumers	Retailers
<p>Survey Core Items</p> <ul style="list-style-type: none"> • Knowledge of consumer rights (Q6, Q7, Q8) • Trust in retailers, authorities and NGOs (Q3_1, Q3_2, Q3_3) • Perceptions of ADRs and Courts (Q3_4, Q3_5) • Safety of non-food products (Q4) • Influence of environmental impacts (Q5) • Accuracy of environmental claims (Q3_6) • Confidence in online shopping (Q17_1) 	<p>Survey Core Items</p> <ul style="list-style-type: none"> • Knowledge of consumer legislation (Q5, Q6) • Awareness of ADRs (Q13a-Q13c) • Safety of non-food products (Q4) • Accuracy of environmental claims (Q12) • Interest and confidence in online selling (Q1a, Q1b, Q2)
<p>Ad-Hoc Modules</p> <ul style="list-style-type: none"> • Information on consumer issues <ul style="list-style-type: none"> • Confidence in own consumer knowledge • Consumer education • Knowledge of consumer organisations • Sources of information on consumer issues • Adequacy of public information on consumer issues • Market information on products <ul style="list-style-type: none"> • Reading of contract terms / conditions for sales • Sources of information on products • Adequacy of labels • E-commerce <ul style="list-style-type: none"> • Trust in websites of online retailers • Websites for product comparisons • Methods of shopping online • Reasons for not shopping online • National Small Claims Procedure 	<p>Ad-Hoc Modules</p> <ul style="list-style-type: none"> • Information on consumer issues <ul style="list-style-type: none"> • Own understanding of consumer knowledge and fair trading obligations • Sources of information on consumer issues • Adequacy of public information on consumer issues and fair trading • Provision of information on consumer rights to consumers • Market information on products <ul style="list-style-type: none"> • Consumer reading of contract terms / conditions for sale • E-commerce <ul style="list-style-type: none"> • Websites for product comparisons • Reasons for not selling online (Q3b) • National Small Claims Procedure

The first question (Q6) refers to the rights of consumers to cancel a transaction concluded via distance channels (post, phone or the internet) and to return the products purchased within the cooling off/ reflection period.¹⁶ Relative to the similar question in the Eurobarometer Survey 358 from 2012, this item is slightly rephrased such that it refers to an example of a product (an

¹⁵ The current EC Consumer Conditions Scoreboard referred to throughout the chapter is the 9th edition released in 2013 (SWD (2013) 291). The numbering of questions for consumers refers to the new questionnaire for the consumer survey, which is to be implemented for the next edition of the EC Consumer Conditions Scoreboard. Table 65 presents the correspondence between the items in the new questionnaire for the consumer survey and the most similar items from the Flash Eurobarometer 358 “Consumers’ attitudes towards cross-border trade and consumer protection”, 2012.

¹⁶ The EU legal provisions for the cooling off period and the right of withdrawal in distance contracts are discussed in chapter 1.2.3.1.

electronic product) to which the rights to period of reflection and withdrawal from a distance transaction apply. Further, the new option “*it depends on the product*” has been introduced in order to enhance the reliability of the answers to the question.

CORE Question Q6 Consumers

Issue: Knowledge of consumer rights

Suppose you ordered a new electronic product by post, phone or the internet, do you think you have the right to return the product you ordered 4 days after their delivery and get your money back, without giving any reason?

1. *Yes*
2. *No*
3. *It depends on the product*

The second item for knowledge of consumer rights (Q7) addresses the issue of legal guarantees provided by default to consumers purchasing a durable good. The phrasing of the question is almost the same as in the respective 2012 Eurobarometer question, but it now includes the new option “*it depends on the product*” as the previous item.

CORE Question Q7 Consumers

Issue: Knowledge of consumer rights

Imagine that a new electronic product you bought 18 months ago breaks down without any fault on your part. You did not buy or benefit from any external commercial guarantee. Do you have the right to have it repaired or replaced for free ?

1. *Yes*
2. *No*
3. *It depends on the product*

The third component of knowledge of consumer rights relates to the issue of inertia selling and the rights of consumers to no response in situations when they receive unsolicited goods (Q8). In this respect, the new questionnaire includes the same question as in the Eurobarometer 358 from 2012.

CORE Question Q8 Consumers

Issue: Knowledge of consumer rights

Imagine you receive two educational DVDs by post that you have not ordered, together with a 20 euro invoice for the goods. Are you obliged to pay the invoice ?

1. *No, and you are not obliged to return the DVDs*
 2. *No, provided that you return the DVDs*
 3. *Yes, you are obliged to pay*
- (EB38 Q8)

The responses elicited based on questions Q6-Q8 can be used either to reflect the consumers' knowledge of these specific issues or, more generally, to compute a summarizing measure of this knowledge by combining the answers to all the questions included in this category. A summary indicator, for instance, can be defined in terms of the average number of correct answers to the questions on consumer knowledge across consumers in the country. Higher country scores for the indicator suggest that consumers have better knowledge on the consumer issues considered.

The second core issue included in the dimension of knowledge, awareness and trust relates to confidence of consumers in the organizations relevant for the protection of consumer rights such as public authorities, retailers, and non-governmental consumer organizations. With respect to these issues, the question (Q3, options 1,2, and 3) included in the new questionnaire is essentially the same as in the Eurobarometer survey 358, with the exception of the slight rephrasing of the option referring to the consumer organisations. In the updated version, the option now refers to “non-governmental” rather than “independent” consumer organisations in order to prevent the over-interpretation of the concept of “independent” organisations by the respondents.

<p>CORE Question Q3 Consumers</p>	<p>Issues: Trust in retailers, authorities and NGOs Perceptions of ADRs and Courts Accuracy of environmental claims</p>
<p>How strongly do you agree or disagree with each of the following statements in [OUR COUNTRY] ...</p>	
<p>1. <i>You trust public authorities to protect your rights as a consumer</i></p>	
<p>2. <i>In general, retailers / service providers respect your rights as a consumer</i></p>	
<p>3. <i>You trust that non-governmental consumer organisations protect your rights as a consumer</i></p>	
<p>4. <i>It is easy to settle disputes with retailers/ service providers through an out of court body (i.e. arbitration, mediation or conciliatory body)</i></p>	
<p>5. <i>It is easy to settled disputes with retailers/ service providers through the courts</i></p>	
<p>6. <i>Most environmental claims related to goods and services in [OUR COUNTRY] are accurate</i></p>	
<p>(Scale: Strongly Agree to Strongly Disagree)</p>	

Based on respondents' rating of options Q3.1, Q3.2, and Q3.3, a summarizing measure of consumers' trust in organizations can be defined as the average number of statements that consumers in the country agree with, in a similar manner as for the summarizing measure of consumer knowledge. Higher values for this measure indicate stronger consumer confidence in the organizations that deal with consumer issues in the country.

Effective mechanisms that help consumers resolve their issues with retailers -through court proceedings or in particular ADR - are conducive to more favorable consumer conditions in a country. This aspect is featured in the current Scoreboard questions on how easy it is for consumers to resolve disputes with retailers through courts and out of court bodies (Q3.4 and Q3.5), items included also in the new questionnaire. Answers to these questions most likely indicate the general perceptions of consumers at large, perceptions that can be the result of direct experience but also due to media campaigns, hearsay from acquaintances and family, or simply subjective evaluations. Therefore, respondents' ratings of the two options can be used to calculate proxy measures of consumers' perceptions of redress mechanisms in the country as percentages of consumers who agree with the statements.

The ability of consumers to make optimal choices is further enhanced by their perception with respect to products offered in the marketplace. Two issues of policy focus are product safety and environmental impacts. With respect to product safety, the item included in the new questionnaire (Q4) refers to consumers' perceptions of safety of non-food products in the market, and it is essentially the same as the corresponding question in the Eurobarometer survey 358. A measure of confidence of consumers in the safety non-food products in the market can be calculated as the percentage of respondents who consider that at least a significant number of non-food products in the market are safe.

CORE Question Q4 Consumers	Issue: Safety of non-food products
<p>Thinking about all non-food products currently on the market in [OUR COUNTRY}, do you think that ...?</p> <p>1. <i>Essentially all non-food products are safe</i> 2. <i>A small number of non-food products are unsafe</i> 3. <i>A significant number of non-food products are unsafe</i> 4. <i>It depends on the product</i> (EB358 Q2)</p>	

With respect to the environmental impacts of products, the new questionnaire for consumers includes two items. First, the influence of those impacts on consumers' choices is reflected in question Q5. The phrasing of the question is essentially the same as in Eurobarometer survey 358, while the options are reformulated such that they now provide several possibilities ranging from no influence of environmental impacts on consumer's purchasing decisions, to influence on some, or all purchases. Secondly, the updated version of the questionnaire for consumers

includes a new item (Q3.6 above) for the confidence of consumers in the accuracy of environmental claims (interpreted as a prerequisite of purchasing on that basis).

CORE Question Q5 Consumers

Issue: Influence of environmental impacts

Considering everything you bought during the last two weeks, did the environmental impact of any goods and services also influence your choice?

1. *Yes, for all or most goods or services you bought*
2. *Yes, but only for some*
3. *Yes, but only for one or two*
4. *No*

Based on these two survey items, possible indicators that proxy the propensity of consumers to make sustainable purchases include the percentage of consumers in the country who believe the environmental claims of producers, suppliers or manufacturers are accurate, and the percentage of consumers for whom at least some purchasing choices are influenced by the environmental impacts of products.

The last core item included for consumers in the first dimension refers to respondents' confidence in online transactions in domestic markets (Q17.1). This item is the same as in the Eurobarometer survey 358. Higher percentages of consumers who state they are confident to shop online from retailers in their own country reflect more reliable conditions for online transactions, and therefore better consumer conditions.

CORE Question Q17 Consumers

Issue: Confidence in online shopping

How strongly do you agree or disagree with the following statements?

1. *You feel confident purchasing goods or services via the internet from retailers/ service providers in [OUR COUNTRY]*
2. *You feel confident purchasing goods or services via the internet from retailers/ service providers in another EU country*

(Scale: Strongly Agree to Strongly Disagree)
(EB358 Q16)

Additional items, designed to substantiate the issues addressed already by the core items, are included in the flexible component of the pillar. With respect to information on consumer rights, issues of interest that could complement the core component of the first dimension include consumers' confidence in own knowledge of consumer rights, their sources of information on consumer issues, and the opinion on the adequacy of such information available to the public.

Other issues of interest include the extent to which individuals in the country have been exposed to training or education on consumer issues,¹⁷ and their knowledge of consumer organisations or public authorities that deal with consumer issues in the country.

Based on other surveys of consumers, we illustrate examples of questions that address the issue of information on consumer rights in Box 2. The Australian Consumer Survey, for instance, asks respondents to self-assess their own understanding of consumer legislation, and to evaluate the adequacy of public information on consumer rights. The Eurobarometer survey on consumer empowerment, on the other hand, asks consumers about their interest in TV or radio programmes dedicated to consumer issues. With respect to this last issue, an alternative is to introduce a more general question on sources of information on consumer issues, including newspapers, specialized magazines, family, friends and colleagues, internet searches, relevant public authorities and so on. This type of question would enable an evaluation of the effectiveness of various information avenues that can be used to inform the public about consumer issues.

¹⁷ Information on consumer education can be collected either based on direct survey questions (i.e. by asking individuals whether they had undergone some form of training or education on consumer issues), or based on data from Member States on whether consumer issues are included in the school curricula at national level.

Box 2 Information on consumer issues – examples of questions

CONSUMERS

- Self-assessment of own understanding
“Which of the following best describes your understanding of your rights when purchasing products or services ? (extremely good understanding to minimal or no understanding)”
(Australian Consumer Survey, 2011, Q7)
- Sources of information on domestic consumer issues
“There are programmes on TV (and radio) which show problems frequently encountered by consumers and provide advice on rights and actions to be pursued. How often have you watched or listened to such programs during the last 12 months ?(at least once a week to never hear of it)”
(Special Eurobarometer 342 Consumer Empowerment, 2010, QA40)
- Adequate of public information on consumer issues
“To what extent do you agree or disagree with the following statement ? << The government provides adequate information and advice about your rights when purchasing products or services in Australia >> (from strongly agree to strongly disagree)”
(Australian Consumer Survey, 2011, Q17.8)

RETAILERS

- Self-assessment of own understanding of consumer and fair trading legislation
“Within your business, how would you rate the understanding of the business’ obligations and responsibilities under fair trading act in Australia ? (extremely good understanding to minimal or no understanding)”
(Australian Business Survey, 2011, Q3)
- Sources of information on domestic consumer issues
“If you needed advice about your rights and obligations under fair trading and consumer protection in Australia, who would you contact: state regulator, general internet search, other business owners/ peers, solicitor or lawyer, [Australian consumer organizations], relevant industry associations, NRA, other ?”
(Australian Business Survey, 2011, Q9)
- Adequacy of public information on consumer issues
“To what extent do you agree or disagree with the following statement ? << The government provides adequate information and advice to help businesses comply with fair trading and consumer protection laws>> (from strongly agree to strongly disagree)”
(Australian Business Survey, 2011, Q8.6)
- Provision of information on rights to consumers
“Does your business provide any information to consumers about their rights and responsibilities when purchasing a product or service from your business ? (yes/ no)
[If yes] How is this information provided to consumers: signage or brochures in store, verbal information provided by the staff, on the company website, written documentation, on the invoice/receipt/ docket/service agreement, user manual/booklet/handbook, other ?”
(Australian Business Survey, 2011, Q16 and Q17)

Other critical issues for an informed purchasing decision refer to market information on products such as contractual conditions for sale/ service or the general characteristics of the products. With respect to contractual conditions, for example, one possible reason for consumers’ dissatisfaction with products purchased could be the fact that they pay insufficient attention to contractual terms or conditions for sale. The first survey question illustrated in Box 3 below, for instance, addresses the extent to which consumers read the contract terms, and their reasons for not doing so if they do not.

Box 3 Market information on products – examples of questions

CONSUMERS

- Reading of contract terms
“Please think about the last time you signed a contract for a service, for example gas, electricity, mobile phone, bank account or insurance. Did you read its terms and conditions? (yes, carefully and completely; yes, but only partially; no; you have never signed this kind of contract)”
[If not or only partially read] *“Why did you not read it all?”*
 - *The contract was too long/required too much time to read*
 - *The contract was too difficult to understand*
 - *The print size was too small*
 - *The seller did not give you enough time to read it before signing it*
 - *You trusted the service provider*
 - *It was not worthwhile as these forms always contain the same information*
 - *These forms contain little useful information*
 - *You have to accept whatever it says in any case*
 - *Other “**(Special Eurobarometer 342 Consumer Empowerment, 2010, QA14 and QA15)*
- Sources of information on goods and services
“Thinking about the last time you purchased a good, such as a household appliance or electronic good, which of the following did you consult in order to make a comparison?”
 - *General media (radio, TV, newspaper)*
 - *Specialized consumer magazines*
 - *Internet – price comparison websites*
 - *Internet – online shops (excluding price comparison websites)*
 - *Internet – other websites*
 - *Visit of different shops*
 - *Family and friends*
 - *Never bought this kind of good before*
 - *Other*
 - *None, do not compare”**(Special Eurobarometer 342 Consumer Empowerment, 2010, QA17)*

The Eurobarometer survey on consumer empowerment from 2010 finds that 60% of consumers in EU27 read the contract terms only partially or not at all. The most prevalent reasons for not reading the terms of sale or contract are the length of the contract, its print size or its difficulty, and the fact that the consumers trusted the supplier.

Information on product characteristics, on the other hand, can be obtained from labels and a variety of other sources such as mass media, consumer magazines, social circles, internet etc. The second example in Box 3 illustrates a question for sources of information on products. These sources include the media, specialized magazines, the social environment, the internet, or direct advertisement in shops.

The third topic included in the ad hoc module focuses on online transactions. The core item of consumers' confidence in the online environment for shopping can be complemented with additional questions on reasons for reluctance to shop online (if applicable), and consumers' use and trust with respect to online comparison tools. With respect to e-commerce and consumers' reluctance, the questions for consumers agreed upon with other EC services and MS experts for future survey modules are included in the box below.

Future Module Question Consumers	Issue: Reluctance to shop online
<p>[If shopping online] You said you have bought goods or services online during the past year. Have you made these purchases ?</p> <p>1) <i>Through a PC (desktop, laptop, tablet)</i> 2) <i>Through a mobile phone</i> 3) <i>Other</i> 4) <i>None of the above</i></p> <p>[New question]</p>	

Examples of related questions from the Eurobarometer surveys on consumer empowerment and internal market are presented in Box 4. Related issues included in ad-hoc modules refer to consumers' habits of shopping online in terms of experience with websites for product comparisons and methods for shopping over the internet.

Moreover, consumers' perceptions of the mechanisms of dispute resolution can be reflected also by their knowledge and opinions on the national small claims procedures for resolving disputes with small claims between consumers and retailers, if such procedures are available in the country. For the purpose of the EC Consumer Conditions Scoreboard, addressing the issue of small claims procedures at national level first requires a study on the availability of such procedures in EU countries, and then a survey of the extent to which these procedures are being known and used by consumers in the countries concerned. Supplementary data on the types of consumer disputes (and associated consumer detriment) tackled through national small claims procedures can be collected also from the relevant authorities of the Member States.

Box 4 E-commerce – examples of questions

CONSUMERS

- Trust in websites of online retailers

“When you are purchasing products or services online, which of the following do you assess if an online retailer’s website is trustworthy?”

- *You only use the websites of well-known brands*
- *You check on the website if the online shop is accredited with a trademark label or logo*
- *You check online reviews from other buyers”*

[If decided not to buy from an online retailer] “Why did you not trust the online retailer ?

- *You had not heard of the online retailer before*
- *The website did not have a trust mark label or logo*
- *The reviews from other buyers were negative*
- *The website did not have information about the delivery process*
- *The website did not have information about the return process*
- *You did not know where the retailer was located*
- *You encountered language problems*
- *Other”*

(Special Eurobarometer 398 Internal Market, 2013, QA5 and QA7)

- Reasons for not shopping online

“Why have you not bought/ ordered any goods or services over the internet for your own private use in the last 12 months?”

- *You have not needed it*
- *You prefer to shop in person, you like to see the goods*
- *You are loyal to shops*
- *This is the force of habit*
- *Relevant information about goods and services are difficult to find on a website*
- *Lack of skills*
- *Delivery of goods ordered over the internet is a problem (it takes too long, or it is logistically difficult etc)*
- *Payment security concerns (giving credit card details over the internet etc)*
- *Privacy concerns (giving personal details over the internet etc)*
- *Trust concerns about receiving or returning goods and complaints/redress concerns*
- *You don’t have a payment card allowing you to pay over the internet*
- *Speed of your internet connection is too slow*
- *Other”*

(Special Eurobarometer 342 Consumer Empowerment, 2010, QA20)

1.5.3.1.2 Retailers - domestic transactions

Consistent with the second criterion of symmetric measurements for consumers and retailers mentioned earlier, the core items for retailers feature issues of knowledge of consumer legislation, awareness of services for alternative dispute resolution procedures, confidence in the safety of products offered in the sector, and interest and confidence in online selling (Table 19, right panel).

With respect to knowledge, the updated questionnaire for retailers includes two items.¹⁸ The first item, question Q5 for retailers, refers to the right of consumers to legal guarantees for defective products. Replacing the more general respective questions on legal guarantees from Eurobarometer survey 359, the question is phrased in terms of a durable good such that it is directly comparable with the question on legal guarantees for defective products introduced in the updated questionnaire for consumers.

CORE Question Q5 Retailers	Issue: Knowledge of consumer legislation
Imagine that a consumer bought a durable good 18 months ago and it breaks down without any fault on his part. He did not buy or benefit from any extended commercial guarantee. Does he have the right to have it repaired or replaced for free?	
<ol style="list-style-type: none"> 1. <i>Yes</i> 2. <i>No</i> 3. <i>It depends on the product</i> 	

The second item for the retailers' knowledge of consumer legislation (Q6) refers to unfair commercial practices prohibited by law. The item builds on a similar question included in the Eurobarometer survey 359 as follows: options 2 and 3 describing generally two types of unfair commercial practices are replaced by two new options, of which one describes the specific example of bait and switch practices.

CORE Question Q6 Retailers	Issue: Knowledge of consumer legislation
I will read 4 statements concerning legislation in [OUR COUNTRY] related to commercial practices. Some of them are prohibited and some are not. For each statement, please tell me if you think it is prohibited or not?	
Multiple choice:	
<ol style="list-style-type: none"> 1. <i>To include an invoice or a similar document seeking payment in marketing material</i> 2. <i>To run a promotional campaign stating "We offer a discount of 60%" although the products offered with a 60% discount are almost depleted</i> 3. <i>To promote products for children including a direct call to parents to buy the advertised products by targeting directly the parents in the advertisements</i> 4. <i>To describe a product as "free" although it is only available for free of charge to customers calling a premium rate phone number</i> 	
Options:	
<ol style="list-style-type: none"> 1. <i>Prohibited</i> 2. <i>Not prohibited</i> 	

¹⁸ The numbers of questions for retailers refer to the new questionnaire for retailers. Table 66 in appendix includes the correspondence between the questions in the updated questionnaire and the most similar items from the Flash Eurobarometer 359 "Retailers' attitudes towards cross-border trade and consumer protection", 2012.

Based on these two items for retailers, a summarizing measure of retailers' knowledge of respective issues can be calculated as the median or average number of correct choices, in a similar manner as described for consumers above.

The second core issue in the first dimension for retailers, awareness of ADR services in the country, is featured in the updated framework based on modified questions on retailers' awareness and participation in ADR schemes (Q13a-Q13c). Relative to the previous versions of the questions included in the Eurobarometer survey 359, the new items have additional advantages. Apart from reflecting the awareness of retailers with respect to ADR services in the country, the updated items now enable the analysis of retailers who are likely to use ADR services (either because they are willing or because the law requires them to do so), the analysis of characteristics of retailers who are not willing to use ADR, as well as the analysis of the coverage of the economy by ADR services. Based on these items, for the first dimension of knowledge, awareness and trust, a measure of retailers' awareness of ADR services can be calculated as the percentage of retailers which state that they are aware of ADR schemes in the country. An alternative is to consider only the percentage of retailers which state that they are aware of ADR services that cover their sector (thus, not including the retailers in sectors not covered by ADR services).

CORE Question Q13a Retailers	Issue: Awareness of ADRs Participation in ADRs
<p>Do you know any Alternative Dispute Resolution (ADR) bodies (i.e. arbitrators, mediators, ombudsman, consumer complaints boards or other out-of-court dispute resolution bodies) for settling disputes with consumers in [OUR COUNTRY] ?</p> <ol style="list-style-type: none"> 1. Yes, and I am willing or obliged to use them 2. Yes, but I am not willing to use them 3. Yes, but those ADR bodies do not cover disputes concerning my business 4. No <p><i>Also the related questions Q13b and Q13c</i></p>	

As with consumers, the retailers' perceptions of the products offered in their sector are currently reflected by questions on safety of products and trust in the environmental claims (Q4 and Q12). With respect to product safety, the updated questionnaire includes the same question on safety of non-food products as the Eurobarometer 359, while for the reliability of advertisements for sustainable products the questionnaire now includes a revised item on retailers' trust in

environmental claims in their sector. These issues can be quantified by the percentage of retailers which consider that a significant number of the non-food products in the market as safe, and by the percentage of retail businesses which assess the environmental claims in their sector as accurate.

CORE Question Q4 Retailers

Issue: Safety of non-food products

Thinking about all non-food products currently available in your market in [OUR COUNTRY}, do you think that ... ?

1. *Essentially all non-food products are safe*
2. *A small number of non-food products are unsafe*
3. *A significant number of non-food products are unsafe*

(EB359 Q11)

CORE Question Q12 Retailers

Issue: Accuracy of environmental claims

Please tell me whether you strongly agree, agree, disagree, strongly disagree with the following statement:

Most environmental claims related to goods or services in your sector in [OUR COUNTRY] are accurate

Scale: *Strongly Agree to Strongly Disagree*

With respect to confidence to sell over the internet in the domestic market, given that selling online requires an initial investment and running costs with the maintenance of a corresponding website and payment methods, the updated survey of retailers first takes into account the interest of retailers to sell online as a pre-condition for confidence. Retailers which do not sell online at the time of the survey are asked whether they are interested and confident to do so in the near future (the new questions Q1a and Q2). On this basis, a simple measure of confidence on the retailers' side is the percentage of retailers who do not currently sell online but express interest and confidence in online selling to domestic consumers.

CORE Question Q1a Retailers

Issue: Interest in online selling

Would your company be interested in selling online in the next 12 months ?

1. *Yes, only to consumers in [OUR COUNTRY]*
2. *Yes, only to consumers in other EU countries*
3. *Yes, to both consumers in [OUR COUNTRY] and in other EU countries*
4. *No*

Also the similar question Q1b.

CORE Question Q2 Retailers**Issue: Confidence in online selling**

Would you say that your company is confident to sell online ?

- 1. Yes, but only when selling to consumers in [OUR COUNTRY]*
- 2. Yes, but only when selling to consumers in other EU countries*
- 3. Yes, when selling to both consumers in [OUR COUNTRY] and in other EU countries*
- 4. No*

The ad-hoc modules for retailers follow closely the flexible component discussed for consumers earlier. The information on consumer issues includes retailers' own assessment of their knowledge in the field, their sources of information, and adequacy of information on consumer legislation and fair trading available publicly. Examples of questions from the Australian Business Survey that address these issues are included in Box 2 above. A new item included in this category for retailers refers to the methods of providing information on consumer rights to customers. The Australian survey, for example, asks retailers whether and how they inform their customers with respect to their rights. As regards market information on products, we find it useful to have the possibility to compare consumers' answers on their reading of contract terms or conditions for sale with retailers' perceptions on the issue. We therefore propose to ask retailers a similar question on their experience with the extent to which their customers read the contract terms/ conditions for sale provided.

Additional details on retailers' attitudes towards online selling refer to their opinion on the websites for product comparisons (relevant to their business), and to their lack of confidence in online selling (if applicable). Websites for product comparisons can bring significant value added in the market to the extent they are not biased towards selected suppliers. For this reason, even if subjective, the assessments of such websites elicited from both consumers and retailers can help inform policy with respect to online trading in a robust manner.

The retailers' reluctance to sell online (if applicable) is explored in the updated questionnaire through a module question on perceived obstacles to online selling in domestic markets (Q3b). This question is a follow up item for respondents which do not sell online at the time of the survey, and it builds on a similar question included for cross-border transactions in the Eurobarometer 359. The advantage of question Q3b is that it provides data for an analysis of obstacles to online selling in domestic markets. Such obstacles reflect the additional commercial

efforts entailed by online transactions relative to transactions on business premises such as compliance with consumer legislation for distance contracts, higher costs of delivery, costs associated with the resolution of disputes related to distance contracts, additional costs incurred with the maintenance of a company website and online after-sale services, as well as higher risks of fraud and non-payment.

<p>MODULE Question Q3b Retailers</p> <p>Issue: Obstacles to domestic online selling</p> <p>How important are the following obstacles to the development of online sales by your company ?</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> 1. <i>Additional consumer protection rules</i> 2. <i>Higher costs of delivery</i> 3. <i>Potentially higher costs involved in resolving complaints and disputes online</i> 4. <i>Higher risk of fraud and non-payment</i> 5. <i>Extra costs from after-sale services</i> 6. <i>Extra need for IT skills</i> 7. <i>Extra need for capital for investment in development of IT applications</i> 8. <i>Online sales are not applicable for my business</i> <p>Options:</p> <ol style="list-style-type: none"> 1. <i>Very important</i> 2. <i>Fairly important</i> 3. <i>Not very important</i> 4. <i>Not at all important</i>
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As for consumers, module questions for retailers could also address the possibility of tackling consumer complaints through the national small claims procedure for domestic transactions, if such procedures were available in the country. Collection of relevant data can be based on a study dedicated to the topic, survey of retailers' awareness of this avenue of dispute resolution (if available), and data reported by the relevant authorities in the Member States.

1.5.3.1.3 Consumers and retailers – cross-border transactions

With respect to transactions across borders within the EU, of primary interest are the attitudes of consumers and retailers towards cross-border trading opportunities. The core items and ad-hoc modules proposed for the cross-border aspects of the dimension of knowledge, awareness and trust are included in Table 20. The question numbers in parentheses refer to the items included in the updated EC questionnaires for consumers and retailers. These questions are included by dimension in Table 65 and Table 66 in appendix.

As a preliminary observation, when compared with measures for domestic transactions calculated at country level, for the items included in the cross-border category we suggest that indicators for of consumer conditions in the single market for all dimensions be calculated first at the EU level, and subsequently disaggregated by country if informative.

Table 20 Knowledge, awareness, and trust - (cross-boarder transactions)

Consumers	Retailers
<p>Survey Core Items</p> <ul style="list-style-type: none"> Confidence in online shopping cross-border (Q17_2) 	<p>Survey Core Items</p> <ul style="list-style-type: none"> Interest and confidence in online cross-border selling (Q1a, Q1b, Q2)
<p>Ad hoc Modules</p> <ul style="list-style-type: none"> Consumer rights cross-border <ul style="list-style-type: none"> Own understanding of consumer rights in other EU countries Sources of information on consumer rights cross-border Adequacy of public information on consumer issues cross-border Market information on products sold cross-border <ul style="list-style-type: none"> Reading of contract terms/ conditions for sales Sources of information on products sold in other EU countries Cross-border e-commerce <ul style="list-style-type: none"> Websites for price comparisons Reasons for not shopping online from other EU countries European Consumer Centers European Small Claims Procedure 	<p>Ad hoc Modules</p> <ul style="list-style-type: none"> Consumer legislation cross-border <ul style="list-style-type: none"> Own understanding of consumer legislation and fair trading obligations cross-border Sources of information on consumer issues cross-border Provision of information on consumer rights to consumers in other EU countries Market information on products sold cross-border <ul style="list-style-type: none"> Consumer reading of contract terms / conditions for sale Cross-border e-commerce <ul style="list-style-type: none"> Websites for price comparison Reasons for not selling online to other EU countries (Q3a) European Small Claims Procedure

The attitudes towards cross-border transactions are primarily reflected by confidence in online trading, as a main method of business interaction between consumers and retailers from different EU countries. The updated questionnaire for consumers includes the same item (Q17_2 above) for consumers' confidence in cross-border online purchases as the Eurobarometer 358, while the updated survey for retailers introduces two new items on confidence and interest to sell online in other EU countries (questions Q1a and Q2 for retailers above). These two core items form the bases of corresponding measures of the extent to which EU consumers and retailers trust the online shopping environment in the internal market.

The topics included in the flexible component of the cross-border aspects of the first dimension are largely similar to the ones discussed in the case of domestic transactions. Therefore, the discussion above also applies to cross-border issues. The cross-border items, however, are adapted to the specific issues raised by disputes between consumers and retailers with respect to transactions in other EU countries. Consumers, for instance, can be asked whether they know about the existence and the role of European Consumer Centres, as well as about their awareness of the possibility to use the European Small Claims procedure in cases where the damages involved are less than 2000 euro.¹⁹ Further details can be considered in terms of the experiences of consumers with these avenues for solving cross-border disputes. Similarly, retailers can be asked about their awareness of the availability of the European Small claims procedure for solving disputes related to smaller amount with their customers.

Of these additional issues, the updated questionnaire for retailers includes already a module question on obstacles to online selling (Q3a). Asked as a follow up question to retail businesses which do not sell online in other EU countries at the time of the survey, this question is similar to the respective item in the Eurobarometer 359 for retailers.

MODULE Question Q3a Retailers	Issue: Obstacles to cross-border online selling
How important are the following obstacles to the development of online sales to other EU countries by your company?	
Multiple choice:	
1. <i>Differences in national tax regulations (e.g. VAT rules)</i>	
2. <i>Differences in national consumer protection rules</i>	
3. <i>Differences in national contract law</i>	
4. <i>Higher costs of cross-border delivery compared to domestic delivery</i>	
5. <i>Potentially higher costs involved in resolving complaints and disputes cross-border</i>	
6. <i>Higher risk of fraud and non-payments in cross-border sales</i>	
7. <i>Extra costs arising from language differences</i>	
8. <i>Extra costs from after-sales service in cross-border transactions</i>	
9. <i>Restrictions on cross-border sales imposed by manufacturers or suppliers</i>	
10. <i>Higher costs due to geographic distance</i>	
Options:	
1. <i>Very important</i>	
2. <i>Fairly important</i>	
3. <i>Not very important</i>	
4. <i>Not at all important</i>	

¹⁹ More details on the European Consumer Centres and the European Small Claims Procedure are provided in Section 3.

In sum, the first framework dimension of knowledge, awareness and trust is primarily based on data collected from the two EC surveys of consumers and retailers, and it can be supported by additional data collected from accompanying studies and from the relevant authorities in the Member States. Many of the questions included in the updated questionnaires are similar or improve upon items already included in the Eurobarometer surveys 358 and 359 for consumers and retailers from 2012, with new items introduced primarily in the survey of retailers. Overall, the survey items proposed for consumers and retailers for the first dimension of general consumer conditions serve to reflect the extent to which participants on both sides of the market are aware of existing regulatory measures for consumer protection, confident in the trading environment (including online), and informed/confident about possibilities to resolve disputes efficiently. A summary of the core indicators defined for this dimension is provided in Table 67 in appendix.

1.5.3.2 Dimension 2: compliance and enforcement

With the second dimension of the framework we aim at measuring the extent to which market participants are affected by deficient trading conditions, violations of consumer regulations, and unfair commercial practices. The items for domestic transactions included in this dimension for consumers and retailers are presented in Table 21. The question numbers in parentheses refer to the items included in the updated EC questionnaires for consumers and retailers. All EC survey questions are included by dimension in Table 65 and Table 66 in appendix.

Table 21 Compliance and enforcement - (domestic transactions)

Consumers	Retailers
<p>Survey Core Items</p> <ul style="list-style-type: none"> • Exposure to unfair commercial practices (UCPs) (Q13a, Q13b) • Shopping problems experienced (Q14a, Q14b, Q16a, Q16b) 	<p>Survey Core Items</p> <ul style="list-style-type: none"> • Prevalence of unfair commercial practices in the sector (Q7a, Q7b) • Monitoring compliance with consumer legislation (Q8) • Competitor compliance with consumer legislation (Q10_1) • Ease and cost of compliance with domestic consumer legislation (Q10_2, Q10_3) • Enforcement of product safety legislation (Q9)
<p>Ad-Hoc Modules</p> <ul style="list-style-type: none"> • Confidence in enforcement measures • Retail channels with consumer problems • Frequency of consumer problems • Channels of advertising UCPs • Frequency of types of UCPs • Most severe shopping problem experienced <ul style="list-style-type: none"> • Shopping and payment methods • Consumer detriment • Media role for compliance • Experience with consumer fraud 	<p>Ad-Hoc Modules</p> <ul style="list-style-type: none"> • Confidence in enforcement measures • Benefits and limitations of domestic consumer and fair trading legislation • Channels of advertising UCPs • Frequency of types of UCPs in the sector • Prevalence of consumer fraud in the sector
<p>Non-Survey Data</p> <ul style="list-style-type: none"> • Data collected based on EU-wide sweeps of online retailers and mystery shopping • Data on types of consumer complaints collected by Member States • Public expenditure with enforcement of consumer legislation (euro per capita) 	

1.5.3.2.1 Consumers – domestic transactions

The extent of compliance with consumer regulations and their enforcement are likely to be reflected on the consumer side of the market through consumers' experiences with unfair commercial practices and consumer problems. As a result, as core issues in this dimension, we propose to consider proxies of compliance and enforcement from the consumer perspective based on perceived exposure to unfair treatment from retailers, and on the prevalence of consumer shopping problems.

Unfair commercial practices (UCPs), such as misleading advertisements and offers, consumer scams, unfair contract terms and, more generally, unfair treatment of consumers, are likely to

undermine consumer confidence in the market and lead to sub-optimal purchasing decisions. Examples of questions from other surveys, designed to elicit consumers' experiences with unfair trading, are provided in Box 5.

The measurement of the prevalence of UCPs invites at least three main issues for reflection. First, as illustrated by the examples provided, and depending on the objective and the methodology of the survey, the list of specific unfair trading practices addressed varies among surveys, and it can be very long.²⁰ This raises the issue of selection of practices that can be analysed in a survey. Second, focusing the questions on consumers' purchases as a result of an unfair transaction runs the risk of underestimating the prevalence of such practices in the marketplace. Coming across such practices does not necessarily imply that the customers were also deceived by them. Even in absence of related purchases, high exposure to UCPs can have detrimental effects on consumers' behaviour by eroding their confidence in the market, and by deterring them from taking otherwise optimal purchasing decisions. Third, the ability of consumers to recognize an unfair commercial practice is likely to be shaped by personal characteristics such as age, education, shopping experience, knowledge of consumer rights, but also by features of the environment in which they shop, including (but not limited to) media campaigns that educate consumers. From this perspective, measurement based on survey data provides an evaluation of perceptions of consumers, and therefore only a proxy of the prevalence of UCPs. Ideally, survey data on individual perceptions should be complemented with data on consumer complaints with respect to unfair commercial practices collected at aggregate level.

²⁰ An indicative list of prohibited unfair commercial practices is provided in appendix of the Directive 2005/29/EC on Unfair Commercial Practices.

Box 5 Unfair commercial practices (UCPs) – examples of questions

CONSUMERS

- Direct experience with unfair commercial practices
 - “Could you look at the list below and say whether you’ve personally been victim to any of these practices in last 12 months to 24 months ?*
 - *Trader not being who they said they were*
 - *Offer must end Monday*
 - *Miracle products*
 - *Fake goods*
 - *Closing down sales*
 - *Targeting children*
 - *Pyramid selling*
 - *Absolutely free*
 - *You are the lucky winner*
 - *Intimidation*
 - *Sales people overstaying their welcome in your home*
 - *Persistent sales calls”*
 - (UK Survey Unfair Commercial Practices, 2009, Q605)*
 - ““Please identify the types of problem experienced with [goods and services]” – 41 types of consumer problems and UCPs listed. Examples of UCPs include:*
 - *Unfair contract terms / contract terms were not clear or did not provide enough information*
 - *Being sold goods or services the consumer did not agree to*
 - *Being put under pressure to buy*
 - *Questionable selling methods such as pyramid selling, inertia selling, selling from multi packs, and bogus selling*
 - *Receiving misleading claims and incorrect information*
 - *Goods or services incorrectly described / Incorrect labelling*
 - *Failure to observe cancellation rights / Failure to give notice or supply adequate notification of cancellation*
 - *Advertised price / quote was wrong or misleading / Being overcharged / Not told the price or not told about some extra costs*
 - (UK Survey Consumer Detriment, 2012, Q2)*
 - “Which of the following best describes the problem you experienced with the product ? (selected for UCPs):*
 - *Unexpected or hidden fees/ charges, overall cost more than expected*
 - *Unclear or unfair terms and conditions in a contract*
 - *Claims made about the product or service by the sales person*
 - *Important information about the product or service not provided*
 - *Advertising for the product or service was misleading*
 - *Scam or rip-off*
 - *Labelling or packaging for the product was misleading*
 - *Charged additional costs for repairs or product replacement*
 - *Other”*
 - (Australian Consumer Survey, 2011, Q35-40)*

With the assumption that the prevalence of such practices in the marketplace is a symptom of weak compliance and enforcement with respect to consumer regulations, the updated framework for the EC scoreboard focuses on the extent to which consumers are exposed to UCPs when interacting with domestic suppliers.

The phrasing of the question on consumers’ perceptions of unfair commercial practices (Q13a) included in the updated questionnaire of consumers helps address all of the three issues

mentioned above. First, the selection of the specific types of UCPs included in the question is based on the following criteria: a) the question is phrased in terms of commercial practices that are easily recognizable by an average consumer, b) the UCPs included are not sector specific (with the exception of the broad distinction between goods and services), and c) these practices are unlikely to be country specific.²¹ Second, consumers are asked about the extent to which they encountered such practices during the normal course of their purchasing business, without necessarily making a purchase as a result.

CORE Question Q13a Consumers	Issue: Exposure to UCPs
<p>I will read you some statements about unfair commercial practices. After each one, please tell me whether you experienced it with retailers from [OUR COUNTRY] or in another EU country. During the last year ...</p> <p>Options:</p> <ol style="list-style-type: none"> <i>You were informed you won a lottery you did not know about, but you were asked to pay some money in order to collect the prize</i> <i>You felt pressured by persistent sales calls or messages urging you to buy something or sign a contract</i> <i>You were offered a product advertised as free of charge which actually implied charges</i> <i>You came across advertisements that the product is available only for a very limited period of time but you finally realized that it was not the case</i> <i>You came across any other unfair commercial practices</i> <p>Answer choices:</p> <ol style="list-style-type: none"> <i>Yes, from retailer located in [OUR COUNTRY]</i> <i>Yes, from retailers located in another EU country</i> <i>No</i> <p>Also the similar question Q13b</p>	

Based on the selections made by consumers when answering the question, a summarizing measure of the exposure to unfair trading practices in the domestic market can be defined as the median or the average number of unfair practices encountered with domestic retailers by consumers in the country. A higher number of UCPs selected by consumers indicates a higher risk of incurring consumer detriment or of deferred domestic transactions, and therefore less reliable consumer conditions in the country.

²¹ To our knowledge, there is not yet a survey of the most prevalent types of unfair commercial practices in the EU Member States. Some preliminary evidence, however, is provided by UK survey on UCPs carried out in 2009. For the UK, the survey finds that around a third of UK consumers fell prey to lottery scams, and 20% of them were harassed by persistent sales calls (Bello 2009). Outside the EU, the Australian Consumer Survey from 2011 found that 22% of Australian consumers had problems with unexpected or hidden fees and charges, and 14% of them had experienced unclear or unfair contract terms (Australian Government 2011).

A second proxy for compliance and enforcement with respect to consumer protection from the consumer side of the market can be based on the prevalence of shopping problems experienced by consumers with retailers in the country. Shopping problems include a multitude of difficulties that consumers encounter with the products they purchase, such as a mismatch between the advertised and actual characteristics of products, delivery problems, problems with the legal guarantee, problems with cooling off periods and returning the products in cases of distance shopping and many other. Examples of questions from other surveys that address consumer shopping problems are illustrated in Box 6 below.²²

As with the unfair commercial practices, the updated framework for the EC scoreboard of general consumer conditions includes questions on specific consumer problems selected based on the following general criteria: 1) they are easily recognizable by consumers, 2) they are not sector specific, and 3) they are unlikely to be country specific. The new questionnaire for consumers has the advantage of enabling a distinction between problems experienced by consumers when shopping online, such as defective orders or delivery problems in Q14a, and shopping problems experienced more generally, such as unfair contract terms and unanticipated extra charges in Q16a.²³ On this basis, a summarizing measure of shopping problems in domestic markets can be defined as the median or the average number of problems experienced domestically by the consumers in the country.

²² Similar questions are included also in the Australian Consumer Survey.

²³ Further improvements of the two survey items can be implemented by including an additional option of “other problems” with the possibility to elicit additional free-form answers in both questions.

Box 6 Consumer problems with products – examples of questions

CONSUMERS

- Problems experienced with goods or services purchased

“Please identify the types of problem experienced with [goods and services]” – 41 types of consumer problems and UCPs listed. Examples of consumer problems include:

 - *Defective/faulty/ lacking durability/wrong/unsuitable products*
 - *Service not provided / delivery problems*
 - *Supplier refusing to help, being difficult or obstructive*
 - *Failure or delay in promised repair / offers of inadequate redress*
 - *Problems with returning unwanted goods*
 - *Problems with the guarantee*
 - *Problems with product or service safety*
 - *Problems with the price of goods and services*
 - *The price was too high for the quality*

(UK Survey Consumer Detriment 2012, Q2)

“When you have purchased products or services online from a seller located in another EU Member State, have you experienced any of the following problems ?

 - *A delay in delivery / Delivery costs higher than stated / Delivery costs too high*
 - *You had to return the product / It was not possible to return the product for reimbursement / The product was returned to the seller but not reimbursed / The package had been lost in the post when returned to the seller*
 - *There were no means to track the delivery status*
 - *You needed to collect the package from a collection point far away / The collection point opening hours were not convenient*
 - *The delivered product was different from the one you ordered*
 - *The delivered product was faulty and there were problems with the guarantee*

(Special Eurobarometer 398 Internal Market, QA2b)
- Shopping methods with consumer problems

“And here are some other ways in which you can purchase goods and services. Have you experienced any problems in the past 12 months for which you consider you had a legitimate cause for complaint with any of these ?

 - *At supermarkets, retailers, dealers, high street, or at local shops*
 - *Using the internet*
 - *Using mail order, delivery and postal services*
 - *Ordering by telephone*
 - *At the doorstep or from a salesman visiting the home*
 - *At an open market or auction*
 - *From a car boot sale*
 - *TV shopping channel”*

(UK Survey Consumer Detriment 2012, Q3B)

CORE Question Q14a Consumers**Issue: Shopping problems experienced when shopping online**

I will read you some statements about problems consumers may have when shopping online. Please tell me whether you experienced any of them when buying in [OUR COUNTRY] or in another EU country during the last year ?

Options:

1. *You received a damaged product or a different product from the one you ordered*
2. *Products were delivered too late*
3. *Products were not delivered at all*

Answer choices:

1. *Yes, when buying from [OUR COUNTRY]*
2. *Yes, when buying in another EU country*
3. *No*

Also the similar problem Q14b.

CORE Question Q16a Consumers**Issue: Shopping problems experienced more generally**

Now, I will read you some statements about problems consumers may have more generally when shopping. Please tell me whether you experienced any of them when buying in [OUR COUNTRY] or in another EU country during the last year?

Options:

1. *You encountered unfair terms and conditions in a contract (for instance, enabling the provider to change the contract terms unilaterally or imposing excessive penalties for breach of the contract)*
2. *You had to pay unanticipated extra charges*

Answer choices:

1. *Yes, when buying in my country*
2. *Yes, when buying in another EU country*
3. *No*

Also the similar problem Q16b.

As with the first dimension of the framework, further details on compliance and enforcement can be elicited by introducing additional questions in the flexible component of dimension 2 (see Table 21 – Ad Hoc Modules). To this end, issues of interest include consumers' confidence in enforcement measures, further details on the advertising and retail channels through which UCPs and consumer problems are more likely to occur, consumer detriment, and experience with consumer scams.

Confidence in compliance and enforcement ultimately reflects the expectations of consumers with respect to incentives of businesses to respect consumer rights in the marketplace. The Australian Consumer Survey from 2011 provides an example of a question that addresses this

issue (Box 7), whereby consumers are asked whether they agree with several statements that reflect confidence in compliance and enforcement. Compared to a general question on consumer confidence, the Australian example is interesting since it addresses the various facets of the process of compliance and enforcement from the perspective of the public at large: consumer protection in case of happenstance shopping problems, protection against rogue traders, as well as issues of efficacy of enforcement of consumer regulations.

Box 7 Consumer legislation: trust and enforcement – examples of questions

CONSUMERS

- Confidence in enforcement measures
 - “To what extent do you agree or disagree with the following statement ? (strongly agree to strongly disagree)*
 - *Businesses who exploit consumers are likely to be detected*
 - *Businesses who exploit consumers will be adequately penalized*
 - *I am confident that the law adequately protects consumers when something goes wrong*
 - *I am confident that the law adequately protects consumers from being exploited”*
- (Australian Consumer Survey, 2011, Q17)*

RETAILERS

- Confidence in enforcement measures
 - “To what extent do you agree or disagree with the following statement ? (strongly agree to strongly disagree)*
 - *The law adequately protects the rights of consumers*
 - *The law adequately protects the rights of businesses*
 - *Where there is a dispute between a consumer and a business the outcome will most likely favor the consumer*
 - *Businesses that do not obey fair trading and consumer protection laws will be adequately penalized*
 - *The government is doing enough to ensure businesses obey the Australian fair trading and consumer protection laws*
 - *Businesses that do not comply with fair trading and consumer protection laws are likely to be detected*
- (Australian Business Survey, 2011, Q8)*

A second category of items proposed for the flexible component of the EC survey includes the frequency of consumer problems and UCPs, and shopping methods through which problems are more likely to occur. In Box 5 above we illustrate an example from the UK survey on consumer detriment that addresses the consumers’ likelihood to experience problems when shopping through specific methods or avenues. For the EC scoreboard on consumer conditions we propose the introduction of a similar question based on the classification of retail channels defined in the EC recommendations on reporting consumer complaints (COM 2010 3021 final) which helps distinguish mobile commerce and internet auctions from other (more traditional) selling

methods. Similar questions can be considered also in terms of methods of advertising unfair commercial practices to consumers.

The assessment of consumer detriment requires direct reference to specific shopping problems experienced by consumers. The UK survey on consumer detriment carried out in 2012, for example, asked consumers detailed questions on up to two shopping problems and the associated financial and non-financial detriment experienced during the previous year (Box 8).

Box 8 Consumer detriment – examples of questions

CONSUMERS

- Financial losses

Q12: "We would like you to estimate the total value of financial losses to you as a result of this [consumer] problem

- Administrative or travel costs*
- Putting things right at your own expense – such as the cost of replacing or repairing the goods or paying for the services again*
- Cost of expert advice or assistance*
- Paying for any "knock on" damage or inconvenience caused to you or any of your possessions as a result of the problem*
- Reduction in the value of the goods or any other possessions as a result of the problem"*

Q18A: "Thinking about the problem again and all of the costs it has caused you, has it impacted at all upon your ability to spend on any of the following:

- Important essentials such as your mortgage, rent and bills*
- Other essentials such as food and clothing*
- Non essential items you buy regularly such as DVDs or take-away food*
- Luxury items such as holidays"*

(Yes/ No)

- Time losses

Q13: "Thinking about the problem again, have you spent any personal time yourself in trying to out things right ? ..."

(from Under 1 hour to Twenty hours or more, or No personal time spent)

- Emotional impacts

Q14: "During the period of the problem taking place, to what extent have you felt ... ?"

Under stress, Angry, Worried, Frustrated

(from A great deal to Not at all)

(UK Survey Consumer Detriment, 2012)

A parsimonious alternative that helps reduce the number of survey questions entails first asking consumers about the most severe problem experienced during the period considered, and then continuing with questions on details about the respective transaction and the detriment incurred. An additional advantage of asking consumers about their most severe recent shopping problem is that, in such cases, they are more likely to pursue a complaint and they are also more prone to recall the details of the experience with higher accuracy.

Further issues considered in this dimension for consumers include their perceptions of the role of the media in informing them about consumer issues and in disciplining the retailers in this respect, as well as experiences with consumer scams such as credit card misuse, or fake services for mortgage and credit restructuring.

Finally, given the inherent limitations of survey data from the consumer side for the measurement of compliance with consumer legislation, the second dimension of consumer conditions can be consolidated based on non-survey data on compliance. These include data collected through EU-wide sweeps of online retailers offering goods or services to the European consumers. As such the Consumer Conditions Index can be complemented for instance with the percentage of websites complying with consumer legislation since the last check of the online sweep. In addition, the results of the online compliance questionnaire mentioned in the support study for the impact assessment on the review of the CPC regulation 2006/2004/EC could be used (European Commission, 2014b). However, the questionnaire and the online sweeps are at the moment only conducted for relatively small samples and will only become more informative in the forthcoming years. Nevertheless, they can already be included in the upcoming Consumer Conditions Scoreboard and used as baseline for monitoring compliance with the Consumer Rights Directive and Unfair Commercial Practices.

A second data source concerns indicators on types of consumer complaints collected by the Member States. With respect to enforcement, a proxy measure of the enforcement efforts made at national level can be defined based on comparable data for the average annual public expenditure on enforcement of consumer legislation, expressed in per capita terms at national level. Further on enforcement of consumer protection measures across EU Member States, a long-term perspective would be enhanced by developing a framework of qualitative and quantitative assessment of the regulatory environment common to all EU Member States.²⁴ The Directorate General on Consumer and Health attempted already to create indicators of

²⁴ An example of a framework developed in order to assess and benchmark the performance of consumer protection regulators is provided by the Australian Good Practice Model (CHOICE 2008).
<http://www.choice.com.au/consumer-action/past-campaigns/consumer-protection/consumer-protection-enforcement.aspx>

enforcement capacity with input and output measures, including budget of public authorities, number of inspectors, number of inspections and number of business visits. However, no meaningful correlations could be found between these input/output measures and survey data of consumers' and retailers' perception on enforcement and compliance. Therefore, the Consumers Directorate of DG Justice and Consumers decided to discontinue the data collection as of 2013.

Finally, a third source of non-survey data that may be considered are the indicators included in the Justice Scoreboard of 2014. The quantitative data of this scoreboard is mostly provided by the Council of Europe Commission for the Evaluation of the Efficiency of Justice (CEPEJ). It contains data on the length of judicial proceedings, the clearance rate and the number of pending cases. The average length of consumer cases going to court could be used as additional indicator for this dimension of the framework (European Commission, 2014c, p. 26-27). As the Justice Scoreboard also includes information on the ADR dispute resolution (European Commission, 2014c, p. 35), we leave it to the expertise of the Consumers Directorate of DG Justice and Consumers to judge in which dimension to use these indicators (see chapter 1.5.3.3).

1.5.3.2.2 Retailers – domestic transactions

On the retailer side of the market, compliance and enforcement with respect to consumer issues can be reflected by a wider range of measures. The core items included for retailers in Table 21 feature retailers' perceptions of prevalence of UCPs in their sector, their opinion on the extent of compliance and monitoring by public authorities, and their assessments of easiness and costs of compliance with consumer regulations.

With respect to the prevalence of UCPs, in order to enable the comparison of opinions on specific unfair commercial practices from the two sides of the market, the updated questionnaire for retailers includes a question similar to the one included in the updated survey of consumers. Question Q7a replaces two more general questions from the Eurobarometer survey 359 on misleading, deceptive or fraudulent commercial practices, and it follows the same three criteria discussed above: 1) the practices are easily recognizable, 2) they are not sector specific, and 3) they are unlikely to be country specific. Further, to the extent relevant, the options of the question for retailers cover the options included in the respective question for consumers. On this

basis, a summarizing measure of the perceptions of the prevalence of UCPs from the retailers' perspective can be determined as the median or the average number of domestic unfair practices selected by retailers in the country.

<p>CORE Question Q7a Retailers</p> <p>Please tell me if you have come across each of the following unfair commercial practices by your competitors in the past year:</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> 1. <i>Offering products as free of charge even if they actually imply substantial charges</i> 2. <i>Pressuring consumers with persistent commercial calls or messages</i> 3. <i>Advertising falsely that a product is available only for a limited period</i> 4. <i>Writing false reviews as hidden adverts or as hidden attacks on competitors</i> 5. <i>Sending unsolicited products to consumers, asking them to pay for the products</i> 6. <i>Other unfair commercial practices</i> <p>Options:</p> <ol style="list-style-type: none"> 1. <i>Yes, in {OUR COUNTRY}</i> 2. <i>Yes, in another EU country</i> 3. <i>No</i> <p>Also the similar question Q7b.</p>	<p>Issue: Prevalence of UCPs in the sector</p>
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Direct general questions for eliciting the retailers' perspectives on compliance and enforcement with respect to consumer legislation are included already in the current EC scoreboard for consumer conditions. The updated questionnaire for retailers builds on these questions as follows. With respect to monitoring compliance with consumer legislation, based on the assumption that businesses are more informed with respect to what happens in their own sector, question Q8 in the new questionnaire is rephrased in such a way that the options now refer to monitoring efforts in the domestic sector (rather than the country) of the retailer interviewed. In options 1-4 the question refers to perceptions of the monitoring efforts of public authorities, non-governmental consumer organisations, self-regulatory bodies, and the media.

CORE Question Q8 Retailers**Issue: Monitoring compliance with consumer legislation**

Please tell me whether you strongly agree, agree, disagree, or strongly disagree with each of the following statements in [OUR COUNTRY]:

Multiple choice:

1. *The public authorities actively monitor and ensure compliance with consumer legislation in your sector*
2. *Consumer NGOs actively monitor compliance with consumer legislation in your sector*
3. *The self-regulatory bodies actively monitor respect of codes of conduct or codes of practice in your sector*
4. *The media regularly report on businesses which do not respect consumer legislation in your sector*
5. *The public authorities actively monitor and ensure compliance with product safety legislation in your sector*

Scale: Strongly Agree to Strongly Disagree

Question 8 includes also an option that refers to monitoring efforts for compliance with product safety legislation. Government efforts for the enforcement of product safety legislation are further explored with question Q9, which is rephrased such that it now addresses the enforcement measures that had been applied in the sector rather than to the business interviewed. Relative to the respective item from the Eurobarometer survey 359, which focused on the direct measures applied by public authorities to the respondent, the rephrased question introduced in the new questionnaire has the advantage of avoiding socially desirable answers.

CORE Question Q9 Retailers**Issue: Enforcement of product safety legislation**

With regard to product safety, please tell me whether any of the following took place in your sector in the past two years:

Multiple choice:

1. *The public authorities asked for the withdrawal or recall of products sold by firms in the sector*
2. *The public authorities issued public warnings about the safety of products sold in the sector*

Options: Yes/ No

Additional core items included for retailers in this dimension refer to competitors' compliance with consumer legislation, and to the perception of the respondent with respect to ease and cost of compliance with this legislation. These items are combined in question Q10 in the updated questionnaire for retailers. Compared with the Eurobarometer survey 359, in the updated questionnaire the issue of compliance with consumer legislation refers only to the respondents' perceptions of the extent to which their competitors in the sector comply with the legal provisions (question Q10_1). This choice is based on the empirical observation that, when it comes to own compliance with consumer legislation, respondents have a tendency to agree with the statement almost unanimously – a result that renders the question redundant. Therefore, a

more reliable measure of the extent of compliance in the sector is elicited based on the aggregation of perceptions of the behaviour of the competitors. In addition, assuming that regulation is best enforced when not unnecessarily burdensome for compliers, the updated framework also includes new items (Q10, options 2 and 3) on retailers' opinions about the ease and costs of compliance with consumer regulations. Measures built on this basis are likely to reflect the perspective of businesses on the extent to which existing regulatory procedures are implemented in an efficient manner.

<p>CORE Question Q10 Retailers</p>	<p>Issues: Competitor compliance with consumer legislation Ease and cost of compliance with consumer legislation</p>
<p>I will read you three statements about compliance with consumer legislation in [OUR COUNTRY]. Please tell me whether you strongly agree, agree, disagree or strongly disagree with each of them:</p>	
<p>Multiple choice:</p>	
<p>1. <i>Your competitors comply with consumer legislation</i></p>	
<p>2. <i>It is easy to comply with consumer legislation in your sector</i></p>	
<p>3. <i>The costs related to compliance with consumer legislation in the sector are reasonable</i></p>	
<p>Scale: Strongly Agree to Strongly Disagree</p>	

Given there are several items that relate to compliance and enforcement from the perspective of retailers, a possibility is to devise four main measures as follows. First, perceived compliance can be proxied by the percentage of retailers who agree that their competitors in the sector comply with consumer legislation. Second, a summarizing measure for the extent to which the institutions and markets are conducive to businesses' observance of consumer rules can be based on the median or average number of statements on the roles of the relevant institutions (public authorities, consumer organisations, self-regulatory bodies, and the media) that the retailers in the country agree with. Third, an indicator of enforcement of product safety legislation can be calculated as the percentage of retailers which select either of the two options referring to enforcement measures in question Q9 discussed above. And fourth, the ease and cost of compliance can be proxied by the percentage of retailers which agree that compliance with consumer regulations does not impose significant burdens on their domestic business.

In the ad-hoc modules for retailers, we propose items similar to the ones specified for consumers such as confidence in enforcement measures, channels of advertising and frequency of unfair commercial practices in the sector, and prevalence of consumer fraud in the sector. An example

of a question on the confidence of retailers in the enforcement of consumer regulations is illustrated based on the Australian Retailer Survey 2011 in Box 7 introduced earlier.

An additional item included in the second dimension of consumer conditions from the business perspective addresses the perceptions of retailers with respect to the benefits and limitations of the regulations. As with the ease and cost of compliance discussed above, answers to this question enable a better understanding of retailers' incentives to comply with consumer regulations, and they can also help inform policy with respect to the scope for a more efficient implementation of the regulations. We found an example of this type question in the Australian Business Survey carried out in 2011 (Box 9).

Box 9 Benefits and limitations of consumers legislation – examples of questions

RETAILERS

- Benefits of consumer legislation
 - Q25: "What do you consider to be the benefits of the Australian Consumer Law?*
 - *It looks after consumers / It protects consumer rights*
 - *It is a national standard / It crosses state borders*
 - *It protects both consumers and businesses*
 - *Streamlined information / Easier for people to understand*
 - *Gives everyone opportunities to resolve issues*
 - *It is fair / It promotes fair trading*
 - *Clarification of rights and responsibilities*
 - *Would get rid of businesses that are not doing the right thing*
 - *Disclosure of information / Public warnings"*
- Limitations of consumer legislation
 - Q26: "Do you foresee any limitations of the Australian Consumer Law ?*
 - *Not good for business / not much support*
 - *Has its limitations*
 - *Too rigid / too many restrictions*
 - *Not enough information*
 - *More paperwork*
 - *That it is not enforced*
 - *General public not educated/informed about it*
 - *The cost involved*

(Australian Business Survey, 2011)

1.5.3.2.3 Consumers and retailers – cross-border transactions

The cross-border aspects of the dimension of compliance and enforcement include similar issues as the ones discussed for domestic transactions. These items are presented in Table 22. The question numbers in parentheses refer to the items in the updated EC questionnaires for

consumers (left panel) and retailers (right panel). All the EC survey questions are included in Table 65 and Table 66 in appendix.

Table 22 Compliance and enforcement - (cross-border transactions)

Consumers	Retailers
<p>Survey Core Items</p> <ul style="list-style-type: none"> • Exposure to unfair commercial practices (UCPs) (Q13a) • Shopping problems experienced (Q14a, Q14c, Q15, Q16a) 	<p>Survey Core Items</p> <ul style="list-style-type: none"> • Prevalence of unfair commercial practices in the sector (Q7a) • Competitor compliance with consumer legislation in other EU countries (Q11_1) • Ease and cost of compliance with consumer legislation in other EU countries (Q11_2, Q11_3)
<p>Ad hoc Modules</p> <ul style="list-style-type: none"> • Retail channels with consumer problems • Frequency of types of consumer problems • Channels of advertising UCPs • Frequency of types of UCPs • Most severe shopping problem experienced <ul style="list-style-type: none"> • Shopping and payment methods • Consumer detriment • Experience with consumer fraud 	<p>Ad hoc Modules</p> <ul style="list-style-type: none"> • Confidence in enforcement of consumer legislation • Benefits and limitations of EU consumer and fair trading legislation • Frequency of types of UCPs in the sector • Prevalence of consumer fraud in the sector
<p>Non-Survey Data</p> <ul style="list-style-type: none"> • Data collected based on EU-wide sweeps of online retailers and mystery shopping • ECC and CPC data on types of complaints from cross-border consumers 	

For consumers, we propose to include consumers' perceptions of their exposure to unfair commercial practices in EU countries other than their own, and their experiences with consumer problems in those countries. The question Q13a in the updated questionnaire for consumers discussed above addresses also the respondents' exposure to unfair commercial practices in other EU countries. With respect to shopping problems, apart from questions on problems with defective products and delivery problems (Q14a and Q14c above), unfair commercial terms and unanticipated extra charges (Q16a above) which also refer to cross-border transactions, the updated questionnaire for consumers includes a new item that refers to consumer difficulties specific to cross-border transactions such as refusal of delivery or of the payment method, and redirection to a national website with different prices (Q15 below). All these questions are asked only to consumers who have experience with cross-border shopping.

CORE Question Q15 Consumers**Issue: Consumer problems cross-border**

During the past 12 months, did you come across any of the following problems when buying goods and services online from another EU country?

- 1. The retailer or service provider refused to deliver to [OUR COUNTRY]*
- 2. The retailers or service provider did not accept the payment from [OUR COUNTRY]*
- 3. You were redirected to a website in [OUR COUNTRY] where the prices were different*

Summarizing core measures for the cross-border axis of the second dimension from the consumers' perspective can be calculated as follows. The exposure of consumers to UCPs throughout the EU single market can be proxied by the median or average number of UCPs experienced by consumers when shopping in another EU country. The second core indicator, the incidence of shopping problems in the EU single market, can be determined as the median or average number of problems with cross-border shopping selected by consumers in the EU sample. Further, these indicators based on survey data on consumers' experiences cross-border can be complemented by consolidated data reported annually by the European Consumer Centres on the types of consumer complaints received from consumers throughout the EU internal market, as well as by data collected through EU-wide sweeps of online retailers and mystery shopping exercises for cross-border transactions. Concerning mystery shopping, the Consumer Condition Index could be complemented with data on the unfair commercial practices that occur during cross-border sales, including the: 1) percentage of cross-border offers for which the ordering process failed, 2) percentage of cross-border shipment failures, 3) percentage of unclear or imprecise pricing of offers (Meier-Pesti and Trüdenbach, 2009). In a future study commissioned by the Consumers Directorate of DG Justice and Consumers, mystery shopping evaluations will be extended to be a baseline for monitoring compliance with the Directive on Consumer Sales and Guarantees.

For retailers, the core items relevant for cross-border transactions include perceptions of the prevalence of unfair commercial practices, competitor's compliance with consumer regulations in EU countries where the respondent sells, and ease and cost of compliance with consumer legislation in those countries. The retailers' perceptions of the prevalence of unfair commercial practices in other EU countries where they do business are elicited through question Q7a introduced above. Assessments of competitors' compliance with consumer legislation, and of the ease and cost of compliance with this legislation are elicited through the core question Q11

below, a question very similar to question Q10 discussed earlier for domestic transactions. All this items are designed to be asked to retail businesses which sell to consumers in EU countries other than the country where they are located.

<p>CORE Question Q11 Retailers Issues: Competitor compliance with consumer legislation cross-border Ease and cost of compliance with consumer legislation cross-border</p> <p>I will read you similar statements about compliance with consumer legislation in other EU countries. Please tell me whether you strongly agree, agree, disagree, strongly disagree with each of them:</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> 1. <i>Companies competing with you in other EU countries comply with consumer legislation</i> 2. <i>It is easy to comply with consumer legislation in your sector in other EU countries</i> 3. <i>The costs related to compliance with consumer legislation in the sector are reasonable in other EU countries</i> <p>Scale: Strongly Agree to Strongly Disagree</p>

The corresponding core indicators include the median or average number of UCPs chosen by retailers in the EU sample, the percentage of EU retailers who agree with the statement that their competitors for cross-border customers comply with consumer regulations, and the percentage of EU retailers who agree that consumer regulations in other EU countries are easy to implement and do not impose significant burdens on their business.

In summary, the dimension of compliance and enforcement reflects primarily the experiences of market participants with respect to the prevalence of unfair trading practices and consumer problems, the compliance of retailers with measures of consumer protection, and enforcement of consumer regulations. When compared with the Eurobarometer survey 358, the updated questionnaire for consumers elaborates on the types of consumer problems experienced both domestically and cross-border, and on the exposure to unfair commercial practices in domestic markets and cross-border within the EU. Relative to the Eurobarometer 359 for retailers, the updated framework introduces new questions on the prevalence of unfair commercial practices and the ease and cost of compliance with consumer regulations. Overall, the main strength of the design of the second dimension of compliance and enforcement is the symmetric approach along the two axes of analysis: participants in a transaction (consumers and retailers) and the type of the transaction (domestic and cross-border). The core indicators defined for this dimension are listed in Table 68 in appendix.

1.5.3.3 Dimension 3: complaints and dispute resolution

Complaining and redress are actions that amend suboptimal transactions in order to reduce, or even eliminate, consumer detriment. Positive experiences of consumers with legitimate complains and unobstructed access to appropriate redress help reinforce consumers' confidence in the shopping environment. The items included in this dimension enable the measurement of the efforts of consumers for seeking redress, and attitudes of retailers in handling the complaints received from their customers. These items are presented in Table 23. In the left panel of the table, the question numbers in parentheses correspond to the questions in the updated questionnaire for consumers; in the right panel of the table, the question numbers correspond to the questions from the updated questionnaire for retailers. All these survey items are discussed below, and also summarised by framework dimension in Table 65 and Table 66 in appendix.

Table 23 Complaints and dispute resolution - (domestic transactions)

Consumers	Retailers
<p>Survey Core Items</p> <ul style="list-style-type: none"> • Complaining actions taken (Q9, Q10) • Reasons for not complaining (Q12) • Satisfaction with complaint handling (Q11) • Experience with ADR mechanisms (combined questions) 	<p>Survey Core Items</p> <ul style="list-style-type: none"> • Methods for handling consumer complaints (Q14a, b, c) • Participation in ADR mechanisms (Q13a, b, c)
<p>Ad-Hoc Modules</p> <ul style="list-style-type: none"> • Information or advice with respect to problem resolution <ul style="list-style-type: none"> • Sources of information • Easiness to find information or advice • Satisfaction with information or advice available • Alternative Dispute Resolution (ADR) mechanisms <ul style="list-style-type: none"> • Effectiveness of ADRs • Likelihood to participate in an ADR • Reasons not to participate in an ADR • Complaining and outcome for the most severe shopping problem <ul style="list-style-type: none"> • Method of complaining • Outcome • Time taken to reach the outcome 	<p>Ad-Hoc Modules</p> <ul style="list-style-type: none"> • Information or advice with respect to problem resolution <ul style="list-style-type: none"> • Sources of information • Easiness to find information or advice • Satisfaction with information or advice available • Alternative Dispute Resolution (ADR) mechanisms <ul style="list-style-type: none"> • Effectiveness of ADRs • Reasons not to participate in an ADR • Types of complaints received from customers (Q16) • Average time needed to handle a complaint (by method)
<p>Non-Survey Data</p> <ul style="list-style-type: none"> • Average time taken to resolve consumer law cases in each Member State (DG JUST) • Data on ADR schemes reported by Member States 	

1.5.3.3.1 Consumers – domestic transactions

For domestic transactions, the core items for consumers include the types of complaining actions taken in cases of shopping problems experienced recently, reasons for not complaining (if applicable), the satisfaction with the way the complaints had been handled, and the consumers' experience with ADR procedures.

First, all consumers are asked whether they had experienced any shopping problem(s) with domestic retailers and, if they did, whether they took any action to address the situation (Q9). Compared with a similar item in the Eurobarometer 358 for consumers, the question is rephrased such that it emphasizes the shopping problem for which there may be legitimate reasons to complain.

CORE Question Q9 Consumers**Issue: Complaining actions taken**

In the past 12 months, did you experience any problem when buying or using any goods or services in [OUR COUNTRY] where you thought you had a legitimate cause for complaint?

1. *Yes, and you took action to solve the problem(s)*
2. *Yes, but you did not do anything*
3. *No*

If they complained, then consumers are asked about the option(s) chosen for complaining (Q10) and about their satisfaction with respect to the way their complaints have been dealt with (Q11). Question Q10 on complaining actions is a multiple choice question since it is possible that some consumers had several shopping problems for which they complained in different ways during the period under considerations, or they had to complain to more than one institution (organization) for the same complaint, or even both. Overall, what the answers to the questions reflect is the propensity of consumers to complain in case of shopping problems. The question on satisfaction Q11, on the other hand, reveals the experiences of consumers with respect to the functioning of the avenues for dispute resolution used. Both questions are included in the same form as in the Eurobarometer survey 358.

CORE Question Q10 Consumers**Issue: Complaining actions taken**

And what did you do ?

1. *You complained about it to the retailer/ service provider*
2. *You complained about it to the manufacturer*
3. *You complained about it to a public authority*
4. *You brought the matter to an out-of-court dispute resolution body (ADR) such as an ombudsman, arbitration, mediation or conciliation body*
5. *You took the business concerned to Court*
6. *Other*

[EB358 Q11]

CORE Question Q11 Consumers**Issue: Satisfaction with complaint handling**

In general, how satisfied or dissatisfied were you with the way your complaint(s) was (were) dealt with by the?

Options:

1. *Retailer/ service provider*
2. *Manufacturer*
3. *Public authority*
4. *An out-of-court dispute resolution body (ADR)*
5. *Court*

Answer choices:

1. *Very satisfied*
2. *Fairly satisfied*
3. *Not very satisfied*

4. *Not at all satisfied*
(EB358 Q12)

If they did not complain, on the other hand, consumers are asked about the reasons they chose to do nothing about their shopping problem (Q12). Reasons include lack of knowledge on whether and where to complain, small consumer detriment, time constraints, unsatisfactory previous experiences with complaining, and reluctance to enter a possible confrontation with the retailer. The question builds on the respective item from the Eurobarometer survey 358 by adding the new option 7 referring to the respondent's attitude towards open disputes with retailers.

CORE Question Q12 Consumers

Issue: Reasons for no action

What were the main reasons why you did not take any action?

1. *You were unlikely to get a satisfactory solution to the problem you encountered*
2. *The sums involved were too small*
3. *You did not know or where to complain*
4. *You were not sure of your rights as a consumer*
5. *You thought it would take too long*
6. *You tried to complain about other problems in the past but were not successful*
7. *You thought complaining would have led to a confrontation, and you did not feel at ease in such situations*
8. *Other*

For measurement purposes, of primary interests are indicators that can reflect the functioning of the complaint channels for consumers in the country. As discussed in chapter 1.2, in cases of shopping problems, the consumer decision to complain is influenced by several factors: the level of consumer detriment, the expectations concerning the chances of success of the complaint, the extent to which the institutional environment enables inexpensive, fast and helpful procedures for dispute resolution, as well as individual characteristics such as shopping experience, knowledge of consumer rights, confidence in arguing for own rights, and time or other constraints.²⁵

²⁵ The results from the Australian Consumer Survey carried out in 2011 indicate, for instance, that the categories of consumers more likely to experience shopping problems during a period of two years under consideration were employed individuals, couples without children, and individuals with tertiary education. Further, according to the survey, the likelihood of complaining for these categories of population, on the other hand, depends on circumstances. A possible interpretation of these results is that individuals with higher education, or who are better-off, are likely to have a richer shopping experience and, as a result, a higher ability to recognize violations of consumer rights. These individuals, however, are also likely to be more time-constrained and to take into account the opportunity costs of complaining, and therefore inclined to complain in circumstances where the benefits are higher than the costs.

Based on the questions included in the EC consumer survey, a first possibility is to define a measure of the propensity of consumers to complain when they experience a shopping problem or unfair treatment from retailers as the percentage of consumers who took action when they had a problem (relative to the pool of consumers who had at least one shopping problem recently).²⁶ While the indicator does suggest consumers confident enough to advocate for their rights, it may also be driven primarily by a large number of shopping problems associated with high consumer detriment (which strengthens consumers' incentives to complain). An alternative is to consider the percentage of consumers who had a shopping problem but did not complain due to reasons that suggest obstacles to complaining such as perceived likelihood of success (option 1 and 6), lack of information on whether and how to proceed (options 3 and 4), and the expected length of the complaining procedure (option 5). This indicator would reflect the extent to which consumers with legitimate reasons to complain are discouraged from complaining due to a lack of relevant institutional support. The possibility to build this indicator based on data from a survey of the general population, however, is limited by considerations of sample size. For instance, in the Eurobarometer survey 358, of the 25% consumers who had a legitimate reason to complain for shopping problems, only a fraction (one fifth) of them chose not to take any action for all reasons combined, including also small consumer detriment.

Second, an indicator that poses no challenges of interpretation focuses on consumers' satisfaction with the way their complaints have been handled. Question Q11 above can be used to define a measure of consumer satisfaction as the average level of satisfaction expressed by consumers in the country with respect to the handling of their complaints through the complaining avenues chosen. Higher consumer satisfaction suggests an effective culture of handling consumer complaints in the country, and therefore better conditions. The calculation of this indicator, however, may run into similar sample size issues at country level especially in countries where consumers have a low propensity to complain.

Third, yet another measure that is conceptually useful for the assessment of the availability and functioning of relevant institutional support for consumers, is the percentage of consumers who

²⁶ A more detailed discussion of the possibilities to build indicators of consumer complaints is included in chapter 0.

had resorted to ADR services procedures for their shopping problems (Q10_4) and agree with the statement that it is easy to solve disputes through out-of-court bodies (Q3_4 presented in Dimension 1). Empirically, however, the possibility to build such an indicator based on a survey of the general population is limited by sample size considerations.

Given the difficulties of interpretation and the empirical hurdles of sample size issues related to the use of data from the EC surveys on the general population, other options for the measurement of the complaining process can be considered. First, the functioning of the complaint channels for individual consumers can be analysed in detail in a dedicated study based on a survey designed specifically for groups of consumers with shopping problems. In a similar manner as in the UK survey of consumer detriment presented in chapter 1.4, for instance, oversampling consumers with experiences of shopping problems during a given period can help obtain suitable sample sizes for indicators of experiences with complaining systems. Second, results from such studies could be complemented by data on the functioning of services for dispute resolution, such as court procedures and ADR, collected from the Member States. An indicator for the length of court proceedings related to consumer law cases, for instance, has already been included in the Judicial Scoreboard of DG Justice. Data on the functioning of ADR services in EU countries will also become available over time, as the new Directive on consumer ADR ²⁷ will come to fruition. Yet another possibility is to carry out a study on the availability and functioning of national small claims procedures for domestic disputes between consumers and retailers in EU Member States. Finally, in the companion report on data analysis for the EC Consumer Conditions Scoreboard, we will explore also the possibility to develop a synthetic indicator of consumers' experiences with complaints based on the three main survey questions discussed above: 1) question Q9 on the complaining actions taken, 2) question Q11 on satisfaction with the complaining procedure, and 3) question Q12 on reasons for not complaining.

Besides the key issues addressed by the core items, knowing where and how to complain is also important as it is a pre-requisite for a successful resolution of a shopping problem. In the flexible component of the dimension of complaints and dispute resolution for consumers we propose to

²⁷ The Directive 2013/11/EU on consumer ADR is presented in chapter 1.2.

enquire further about consumers' experiences with respect to the information and advice they can access easily when seeking redress for a consumer problem, their willingness to resort to ADR procedures, as well as specific details about the process of complaining in a particular instance, such as the most severe recent shopping experience.

First, a possibility is to ask consumers about platforms/ sources where they seek information and advice and how easy it is to find such information or advice when needed, as in the examples from the Australian Consumer Survey from 2011 illustrated in Box 10. The Australian Consumer Survey collects data on the process of finding advice and information with respect to the resolution of consumer problems. Consumers are asked about the methods they use to get informed about consumer issues in case of need, how easy it is to find such information or advice, and how satisfied they are with the advice received. We propose introducing similar questions in the flexible component of the EC Scoreboard in order to elicit more details about the availability of advice or information needed by European consumers.

Box 10 Information and advice for problem resolution – examples of questions

CONSUMERS

- Sources of information or advice for problem resolution
Q48: [When experiencing a problem] “Where did you go for information or advice?”
 - Friends, colleagues, family members
 - General internet search
 - State regulator website/ telephone helpline
 - ACCC website/ telephone helpline
 - Ombudsman
 - Solicitor/ lawyer
 - The business I had an issue with / the business’ website
 - Choice website
 - Tenancy tribunal/ Real Estate institute”(Australian Consumer Survey, 2011, Q48)
- Easiness to find information or advice
Q49: “How easy would you say it was to find information or advice in relation to your problem?”
(from *Extremely easy* to *Not at all easy*)
- Satisfaction with the information or advice received
Q52: *How satisfied or dissatisfied were you with the response received from [state regulator/ the business/ ombudsman etc] ?”*
(Australian Consumer Survey, 2011)

RETAILERS

- Sources of information or advice for problem resolution
Q10: “If you needed advice about your rights and obligations under fair trading and consumer protection laws for a particular scenario with a consumer, who would you contact?”
 - State regulator
 - General internet search
 - Other business owners/ peers
 - Solicitor or lawyer
 - [relevant Australian institutions]
 - Relevant industry association”(Australian Business Survey 2011)

The second issue of policy interest that we propose to explore in greater detail refers to consumers’ perceptions and experiences with respect to services for alternative dispute ADR procedures. As discussed in Dimension 1, the updated questionnaire for the EC scoreboard already includes a question on consumers’ perceptions of how easy it is to use ADR services (Q3_5). Additional questions could address consumers’ likelihood to resort to ADR services, and reasons for not doing so (if applicable). Examples of questions on consumers’ motivation or reluctance to use ADR services are provided based on the Australian Consumer Survey in Box 11.

Box 11 Alternative dispute resolution (ADR) schemes – examples of questions

CONSUMERS

- Likelihood to resort to an ADR service
Q30: "If you had an issue with a business and you were unable to resolve it, how likely would you be to participate in a dispute resolution service such as conciliation or mediation?"
(from *Definitely would participate* to *Unlikely to participate*)
- Reasons for not participating in an ADR procedure
Q31: [If unlikely to participate] "Can you explain the reasons:
 - *Too much trouble / Would not be worth the hassle or effort*
 - *Don't have time / Time consuming*
 - *Dislike confrontation / Not confident enough*
 - *Don't know how / Lack of knowledge*
 - *Fruitless task / Consumer rarely wins/ Big companies always win*
 - *Only of the issue was important*
 - *Prefer to handle it myself/ Boycott the company/ Spread the word*
 - *Don't think the service will help / make a difference*
 - *Too expensive for what it's worth/ Would be worried about the cost*
 - *Would expect the regulator/ ombudsman to assist me before taking the dispute further"**(Australian Consumer Survey 2011)*

RETAILERS

- Experience with an ADR procedure
Q12: "Has your business ever participated in a third party dispute resolution process with a consumer?" (Yes/ No)
Q13: "Based on your experience with these dispute resolution services, how would you rate the effectiveness of these types of services?" (from *Extremely effective* to *Not at all effective*)
- Likelihood to participate in an ADR procedure
Q14: "In the future, if your business has an issue with a consumer and you were unable to resolve it, how likely would you be to participate in a third party dispute resolution process?"
(from *Very likely* to *Very unlikely*)
- Reasons for not participating in an ADR procedure
Q15: [If unlikely to participate] "Can you explain the reasons?"
 - *Prefer to resolve it myself/ don't want to involve a third party*
 - *Don't think it is effective/ Not worthwhile/ Unsatisfactory in the past*
 - *Would rather use some avenue/ Lawyer/ Solicitor*
 - *Had never had any problems/ Can't see the need for it*
 - *Would sort it out before it got to that stage*
 - *Costs too much time and money*
 - *Don't know enough about it*
 - *They are biased towards the consumer*
 - *Only if I thought I was right/ could not lose*
 - *Would always fix problems to keep our good name"**(Australian Business Survey 2011)*

Further, consistent with the corresponding item proposed for the flexible component of dimension 2 for consumers, specific details on the complaining process can be elicited by asking the survey respondents about their experiences with shopping problems experienced recently. In case a consumer has experienced more than one problem, a robust choice is the shopping problem viewed by the individual as most severe. Details of interest include the method(s) used for complaining (such as the retailer concerned, a public authority, an ADR service, legal courts), the outcome of the complaint (solved, not solved, pending), and the time needed to reach the

outcome. An example of a question that addresses the outcome of a complaint is illustrated in Box 12, based on the Australian Consumer Survey.

Box 12 Outcomes of consumer complaints – examples of questions

CONSUMERS

- Outcome of a consumer complaint

Q56: [Complaint for a consumer problem] *“Which of the following best describes the problem now. Is it ...?”*

- *Resolved to your satisfaction*
- *Resolved but not to your satisfaction*
- *In the process of being resolved*
- *Unresolved and unlikely to be resolved”*

Q57: [If problem unlikely to be resolved] *“Can you explain the reasons why it is unlikely that the problem will be resolved ?*

- *I won't take it any further / Have given up trying / Not worth it*
- *They do not care/ Not cooperating / Won't listen / Won't admit fault*
- *I am going to take my business elsewhere*
- *Still pending/ongoing/not resolved yet/ I have to initiate an action*
- *Can't get hold of them/ They have not returned my calls/responded*
- *I do not have proof/ lost the receipt/ I did not read the small print*
- *Because it will cost me too much money to fix it*
- *They continue to charge excessive fee/ charges/ bills*
- *Not happy with the product/ service/ various”*

(Australian Consumer Survey, 2011)

1.5.3.1 Retailers – domestic transactions

For retailers, the core items in dimension 3 include the methods used by retailers to handle consumer complaints, and the willingness of retailers to participate in ADR schemes. These items are presented in Table 23, right panel, introduced earlier.

For domestic transactions, the updated questionnaire for retailers introduces new questions (Q14a-Q14c) on the retailers' experiences with the methods for handling consumer complaints. These methods include in-house customer service, public authorities, ADR schemes, non-governmental consumer organisations, and courts.

CORE Question Q14a Retailers	Issue: Methods for handling complaints
During the past 12 months, did your company receive complaints from consumers in [OUR COUNTRY]?	
<ol style="list-style-type: none"> 1. Yes, through in-house customer service 2. Yes, through non-governmental consumer organizations 3. Yes, through public authorities 4. Yes, through alternative dispute resolution bodies (such as ombudsman, consumer complaints board, arbitrators, mediators, or other out-of-court bodies) 5. Yes, through courts 	

6. *Yes, through other channels*
7. *Didn't receive any complaints*

Also the similar questions Q14b and Q14c.

The second core item for retailers addresses their effective participation in ADR schemes. As discussed in Dimension 1, the updated questionnaire for retailers includes a question on awareness, coverage and commitment of retailers with respect to ADR services (Q13a-Q13c in Dimension 1 above). On this basis, a core proxy indicator that reflects participation of retail businesses in ADR schemes can be defined as the percentage of retailers who are willing or obliged by law to participate in an ADR scheme.

The flexible component of this dimension for retailers includes additional items similar to the ones discussed for consumers above. These items include information and advice with respect to the resolution of disputes with consumers, additional details on the use of ADR services, types of complaints received from customers, and the average time needed to handle a consumer complaint.

The updated questionnaire for retailers already introduces a module question for the types of complaints received by the respondent from domestic consumers. The question options include the types of consumer problems which are featured in the earlier questions on shopping problems discussed in Dimension 2 of compliance and enforcement. In this way, it becomes feasible to compare the prevalence of consumer complaints to retailers for given shopping problems with the prevalence of the same shopping problems among consumers.

MODULE Question Q16 Retailers

Issue: Types of complaints received

What type of complaints did your company receive from consumers in [OUR COUNTRY] during the past 12 months? Were they complaints ...

1. *about the product itself*
2. *about late or no delivery*
3. *about contractual terms*
4. *about extra charges*
5. *about safety of products*
6. *about remedies offered by the company following a complaint*
7. *Other*

1.5.3.2 Consumers and retailers – cross-border transactions

As with the first two dimensions, the resolution of complaints related to cross-border transactions at the EU level is reflected by data for both consumers and retailers. These items are presented in Table 24. The question numbers in parentheses correspond to the items in the updated questionnaires for consumers (left panel) and retailers (right panel). All questions are presented by dimension in Table 65 and Table 66 in appendix.

Table 24 Complaints and dispute resolution - (cross-border transactions)

Consumers	Retailers
ECC, CPC, ODR Data - Core Items <ul style="list-style-type: none"> • ECC and CPC data on dispute resolution • ODR feedback data 	Survey Core Items <ul style="list-style-type: none"> • Methods for handling consumer complaints (Q15)
Ad hoc Modules <ul style="list-style-type: none"> • Information or advice with respect to problem resolution <ul style="list-style-type: none"> • Sources of information and advice • Easiness to find information and advice • Satisfaction with information or advice available • Complaining and resolution of most severe shopping problem <ul style="list-style-type: none"> • Method of complaining • Outcome • Time taken to reach the outcome 	Ad hoc Modules <ul style="list-style-type: none"> • Information or advice with respect to problem resolution <ul style="list-style-type: none"> • Sources of information and advice • Easiness to find information and advice • Satisfaction with information or advice available • Types of complaints received from consumers cross border (Q17) • Average time needed to tackle complaints from cross-border consumers (by method)

In the current EC scoreboard, data on cross-border complaints of EU consumers are collected through the European Consumer Centres (ECCs) and the Consumer Protection Cooperation System (CPC). Based on these databases, the EC scoreboard reports the number of complaints filed by EU consumers to ECCs, and information and enforcement requests made by Member States to each other through CPC. Further, additional data will become available over time with the establishment of the EU platform for online dispute resolution (ODR). The recent Regulation for consumer ODR provides for a feedback system through which consumers and retailers can

assess the effectiveness of the ODR platform and of the ADR services which handle their complaints.²⁸

Besides the core data on complaints for cross-border transactions collected through ECCs, CPC network and the ODR feedback system, additional details of interest on the process of filing cross-border complaints include consumers' opinions on sources for information and advice and on the easiness to find such information and advice, and the satisfaction of respondents with the help received. The effectiveness of the resolution of problems with cross-border transactions can be further explored by asking consumers about the time taken to solve a given complaint, such as the most severe cross-border problem.

For retailers, the updated framework introduces a new core item similar to the one discussed for domestic transactions above. Question Q15 addresses the experiences of retailers with methods of handling complaints from cross-border consumers. These include the methods that apply to domestic transactions, such as in-house customer service, local public authorities, NGOs, ADR services, and courts, but also avenues available specifically for cross-border complaints in the EU, such as the European Consumer Centres and the European Small Claims Procedure.

CORE Question Q15 Retailers	Issue: Methods for handling cross-border complaints
During the past 12 months, did your company receive complaints from consumers in other EU countries?	
<i>1. Yes, through in-house customer services</i>	
<i>2. Yes, through European Consumer Centres</i>	
<i>3. Yes, through non-governmental consumer organisations</i>	
<i>4. Yes, through public authorities</i>	
<i>5. Yes, through alternative dispute resolution bodies (such as ombudsman, consumer complaints board, arbitrators, mediators, or other out-of-court bodies)</i>	
<i>6. Yes, through the European Small Claims Procedure</i>	
<i>7. Yes, through courts (other than through the European Small Claims Procedure)</i>	
<i>8. Yes, through other channels</i>	
<i>9. Didn't receive any complaints</i>	

In ad-hoc modules, we propose to ask retailers further details about their experiences with respect to complaints from cross-border consumers, including the sources of information and

²⁸ Further details on the Regulation 524/2013 on consumer ODR and the ODR platform are provided in Section 1.2.

advice on the resolution of cross-border complaints, the types of complaints received, and the time needed, on average, to solve such complaints through various avenues.

The updated questionnaire for retailers provides already the new module question on the types of complaints received by the respondent from cross-border consumers (Q17), a question similar to Q16 for retailers, domestic transactions, discussed above.

MODULE Question Q17 Retailers	Issue: Types of cross-border complaints received
<p>What type of complaints did your company receive from consumers in other EU countries during the past 12 months? Were they complaints ...</p> <ol style="list-style-type: none"> 1. <i>about the product itself</i> 2. <i>about late or no delivery</i> 3. <i>about contractual terms</i> 4. <i>about extra charges</i> 5. <i>about safety of products</i> 6. <i>about remedies offered by the company following a complaint</i> 7. <i>Other</i> 	

In summary, the third dimension of the updated framework focuses on experiences of consumers and retailers with respect to the services supporting the process of complaining and the resolution of disputes related to shopping problems. On the consumer side of the market, the main challenges in building adequate measures for this dimension are empirical. Given the relative low frequency of consumers with shopping problems in the general population, the data collected through EC surveys need to be complemented by data from other sources, such as studies based on oversampling these groups of consumers, as well as hard data collected at the national or EU level. On the retailer side of the market, however, the strength of the updated framework resides in introducing new items that reflect the experiences of retailers with consumer complaints both domestically and cross-border.

The core indicators defined for the dimension of complaints and problem resolution are included in Table 69 in appendix.

1.5.3.3 Characteristics of respondents

In this chapter, we present the remaining questions on the characteristics of respondents in the updated questionnaires for consumers and retailers. These items are presented in Table 25. The

question numbers refer to the items included in the updated questionnaires for consumers (left panel) and retailers (right panel). All the core questions on socio-demographic characteristics of respondents are included in Table 65 and Table 66 in appendix.

Table 25 Characteristics of respondents

Consumers	Retailers
<p>Survey Core Items</p> <ul style="list-style-type: none"> • Nationality (D01) • Country of residence, region, locality type (D12, D13) • Age and gender (D1, D2) • Age when stopped full-time education (D4) • Current occupation (D5) • Frequency of internet use (D6) • Landline/ mobile phone (D18, D20) • Experience with EU cross-border shopping (Q1_2, Q2) • Experience with online shopping (Q1) 	<p>Survey Core Items</p> <ul style="list-style-type: none"> • Final consumers as customers (B1) • Number of employees (≥ 10) (B2a, B2b) • Respondent's position in the company (B3) • Company turnover (D1) • Experience with cross-border sales (D2) • Languages used for business (D3) • Retails channels used (D4) • Experience with online sales (D5a, D5b) • Types of products sold (D6)
<p>Ad-Hoc Survey Modules</p> <ul style="list-style-type: none"> • Numerical literacy (Q20) • Languages (Q18) • Household financial strain (Q19) • Ethnicity • Self-assessment of consumer vulnerability • Self-assessment of consumer style • Self-assessment of internet skills • Methods of shopping • Household income • Household composition 	<p>Ad-Hoc Survey Modules</p> <ul style="list-style-type: none"> • Sector of activity • Type of ownership • Year when the company was established • Company website • Share of cross-border activity in total
<p>Aggregate data</p> <ul style="list-style-type: none"> • Experience with online shopping (ICT) • Types of products purchased online (ICT) • Methods of online shopping (ICT) • Computer literacy (ICT) • Household material deprivation (EU-SILC) • Household financial difficulties (EU-SILC) 	<p>Aggregate data</p> <ul style="list-style-type: none"> • Experience with online selling (ICT) • Company website (ICT) • Turnover from online sales via websites (ICT) • Types of products sold online (ICT)

For consumers, the updated framework includes many of the respondent characteristics present in the Eurobarometer survey 358. The questions on age, gender, education, occupation and location are essentially the same (see Table 65 in appendix). Of these questions, however, our view is that the items on education and occupation could be improved upon as follows.

First, with respect to education, instead of asking respondents about the age when they stopped full time education (question D4), we recommend following the example of other EU surveys such as EU SILC ²⁹ in measuring education in terms of the levels of education successfully completed (EU SILC 2010). An alternative is to ask individuals about the number of years of full-time education completed.

CORE Question D4 Consumers	Issue: Education
How old were you when you stopped full time education?	
(EB358 D4)	

Second, with respect to occupation, the current question D5 refers both to occupation and labour market status. For the analysis of consumer conditions, however, our view is that, especially from the perspective of vulnerable consumers, a more informative distinction is enabled by a precise identification of the labour market status in terms of the employment situation (i.e. whether the individual is fully or part-time employed, self-employed, unemployed or out of the labour force), and the type of the employment contract (permanent, temporary long-term or temporary short-term) if employed. An example of a question on self-defined labour market status is provided by EU SILC, whereby individuals are asked to choose the status that applies to them from among the following options: working full time, working part time, unemployed, in education or training (pupil, student, further training, unpaid work experience), in retirement or early retirement or has given up business, permanently disabled and/or unfit for work, in compulsory military or community service, fulfilling domestic tasks and care responsibilities, other inactive person (EU SILC 2010). This type of question would enable the analysis of perceptions and experiences of individuals in the shopping environment as a function of their labour market status.

²⁹ EU SILC is the EU Survey on Income and Living Conditions.

CORE Question D5 Consumers**Issue: Current occupation**

As far as your current occupation is concerned, would you say you are self-employed, an employee, a manual worker or would you say you are without a professional activity? Does it mean you are a(n) ...

SELF-EMPLOYED (Farmer, forester, fisherman; owner of shop, craftsman; professional; manager of a company)

EMPLOYEE (professional; general management, director or top management; middle management; civil servant; office clerk; other employee)

MANUAL WORKER (supervisor/ foreman; manual worker; unskilled manual worker)

WITHOUT A PROFESSIONAL ACTIVITY (looking after the home; student full-time; retired; seeking a job)

(EB358 D5)

Besides the demographic characteristics of respondents, the core items for consumers include also questions on experience with the use of internet, and with cross-border and online shopping. With respect to internet, the question on whether individuals have internet at home from the Eurobarometer survey 358 is now replaced by the question D6 on the frequency of use of the internet. Based on the assumption that knowing how to use the internet is a necessary condition for online shopping, and that frequent use is highly correlated with a higher ability to use the internet for private purposes, answers to this question are expected to help identify the consumers who, in principle, should have no difficulties to shop online, if desired.

CORE Question D6 Consumers**Issue: Frequency of internet use**

How often do you use internet for private purposes?

1. *Every day or almost every day*
2. *At least once a week (but not every day)*
3. *At least once a month (but not every week)*
4. *Less than once a month*
5. *Hardly ever*
6. *Never*

Consumers' actual experiences with online shopping are reflected by answers to the core question Q1. This question improves upon the previous version in the Eurobarometer survey 358 in that it includes the additional option 5 for those consumers who, when buying online, could not distinguish where the retailer was located (in the consumer's country or abroad). The other four options remain unchanged, and they help distinguish whether the responded has experience with online shopping in domestic markets, cross-border within the EU, or outside the EU.

CORE Question Q1 Consumers**Issue: Experience with online shopping**

In the past 12 months, have you purchased any goods or services via the internet in [OUR COUNTRY] or elsewhere in any of the following ways ...?

1. *Yes, from a retailer/ service provider located in [OUR COUNTRY]*
2. *Yes, from a retailer/ service provider located in another EU country*
3. *Yes, from a retailer/ service provider located outside the EU*
4. *No*
5. *Yes, you purchased online but do not know where the retailer/ service provider is located*

Further details on consumers' experiences with cross-border shopping are also elicited through the new question Q2, whereby consumers are asked whether they had purchased any goods or services through other channels than the internet from other EU countries. Both questions Q1 and Q2 for consumers serve as filters for other questions in the questionnaire on shopping problems related to online and/or EU cross-border shopping.

CORE Question Q2 Consumers

Issue: Experience with EU cross-border shopping

In the past 12 months, have you purchased any goods or services through channels other than the internet from a retailer/ service provider located in another EU country?

Yes/ No

The flexible component for consumers focuses on two main types of consumers' characteristics that can complement the analysis in the current EC scoreboard: 1) the vulnerability of individuals when interacting as consumers in the marketplace, and 2) their ability to adapt to the new developments in the shopping environment, notably online and cross-border shopping opportunities.

Vulnerable consumers are individuals who are more likely to fall prey to unfair commercial practices and consumer scams, or more prone to experiencing consumer problems due to age, physical or mental impairment, financial strain, or other individual idiosyncrasies. Elderly persons, for instance, are in a weaker negotiation position when approached by sales agents for doorstep selling; children and teenagers are more exposed to hidden or deceptive advertising on websites selling games or other digital applications; and individuals strained financially may be more likely to be lured by lottery scams or fake offers for credit restructuring.

If age or education levels are individual characteristics which are relatively easy to observe directly, other conditions or circumstances that can place individuals in a vulnerable position when interacting with retailers are more difficult to measure. These include characteristics such

as health impairments, limited basic shopping skills, or financial pressure.^{30, 31} Examples of survey questions that focus on consumer vulnerability are illustrated in Box 13 below, based on the UK survey of unfair commercial practices from 2009, and on the US FTC survey on consumer fraud from 2011.

The question from the UK survey is designed to elicit consumers' own assessments of their vulnerabilities when interacting with retailers. Vulnerability in this case is defined primarily in terms of health problems, poor financial circumstances, age, and other personal issues. The US survey, on the other hand, addresses behavioural issues either related to the shopping style, or to negative life events that usually correlate highly with compulsive shopping.

Poor financial circumstances can induce consumer vulnerability in several ways. First, a low level of income can drive individuals to shop products of very low quality, to buy from unreliable sellers, to accumulate unmanageable consumer debt, or to fall prey to consumer scams that carry false promises of quick rewards, immediate debt relief, or huge discounts. Poverty is also associated with social exclusion which, from the perspective of consumer issues, may lead to lower confidence when dealing with retailers. A second type of vulnerability is high indebtedness, which is indicative of a low income, but also of compulsive shopping, lack of skills in evaluating credit contracts, or poor money management skills.

³⁰ Further, there may not even be a direct, observable correspondence between a given individual trait and consumer vulnerability, but rather a non-linear relationship driven by circumstances (such as health impairment in an environment less adapted to consumers with such difficulties).

³¹ Other issues relevant for consumer vulnerability, but not discussed in this report, relate to discrimination based on gender, ethnicity, minority groups, language spoken at home, or origin.

Box 13 Consumer vulnerability – examples of questions

- Self-assessment of vulnerability

“Please read the statements below and select if you feel that any of them apply to you:

 - *I have health problems which I feel make me more vulnerable than others when faced with dishonest/aggressive traders and unfair practices of the type we’ve talked about here*
 - *My poor financial circumstances make me more of a target for dishonest/aggressive traders*
 - *I feel my age makes me more vulnerable than others when dealing with dishonest/aggressive traders*
 - *I have other personal issues than the ones above which I think make me more vulnerable than others to dishonest/aggressive traders”*

(UK Survey Unfair Commercial Practices, 2009, Q800)
- Negative life events

“In the past two years [...] have you experienced a serious negative life event, such as a divorce, death of a family member or close friend, a serious injury or illness in your family, or the loss of a job ?” (Yes/ No)

(US FTC Fraud Survey, 2011, Q73)
- Consumer shopping style

“Now I would like to read you several brief sentences that could describe you. On a scale of 1 to 7 where 1 indicates that the sentence would almost never describe you and 7 indicates that it would almost always describe you, please indicate how well each of the following would describe you:

 - *I am a planner*
 - *I am impulsive*
 - *I am self-controlled*
 - *I enjoy spending money*
 - *I am willing to take risks*
 - *I am patient”*

(US FTC Fraud Survey, 2011, Q72a-f)

As regards measurement, the level of income relevant for consumption can be expressed in terms of the equivalised disposable income, which takes into account the size and composition of the household in which the respondent lives.³² The financial pressure, on the other hand, can be proxied by the respondents’ own assessments of financial pressure, as illustrated by examples of survey questions included in Box 14. The questions in the Eurobarometer on consumer empowerment, for instance, are phrased in terms of ability to cope with current expenses, or to pay the bills at the end of the month. These types of questions, however, do not allow for a distinction between the financial pressure due to insufficient resources and the difficulties generated by high levels of debt. A direct question on the pressure of indebtedness on individuals is included in the US survey on consumer fraud, where individuals are asked about their ability

³² Eurostat endorses the use of the modified OECD scale for the calculation of the equivalised disposable income. Details are provided at: http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Equivalised_disposable_income

to handle their current debt (which, for some individuals, can be primarily accumulated consumer debt).

Box 14 Financial difficulties – examples of questions

- Difficulties to make ends meet/ pay bills
"[...] Thinking about your household's total income, is your household able to make ends meet (namely, pay for its usual necessary expenses) ...? " (from *With great difficulty* to *Very easily*)
"During the last 12 months, would you say you had difficulties to pay your bills at the end of the month ?" (from *Most of the time* to *Almost never*)
(*Special Eurobarometer 342 Consumer Empowerment, 2010, QA51 and D60*)
- Ability to handle current personal debt
"And thinking for a moment about your personal debt on which you currently make interest payments. I am talking about your debts you partially pay-off each month for things like mortgages, credit cards, personal loans or car loans. Would you say that the amount of debt you currently have is ...
 - *More than you can handle financially*
 - *About as much as you can handle financially... or ...*
 - *You could handle more debt than you currently have*
 - *[Do not any personal debt]"**(US FTC Fraud Survey, 2011, Q81)*

Of these module issues, the updated questionnaire for consumers introduces a new question on the individual's difficulty to make ends meet on a monthly basis (Q19), a question similar to the one from the Eurobarometer survey on consumer empowerment discussed above. Alternatives to this question can refer directly to the level of household income and to the ability to handle current debt payments.

MODULE Question Q19 Consumers

Issue: Household financial strain

Would you say that making ends meet every month for you ...?

1. *Very difficult*
2. *Fairly difficult*
3. *Fairly easy*
4. *Very easy*

As regards consumers' limited abilities to take advantage of market opportunities, driving factors may include lack of shopping skills, such as difficulties to make simple numerical calculations for discounts and interest rates, limited or no skills in using the internet for online shopping, and limited proficiency with a foreign language (possibly with wide circulation) for cross-border shopping. Of these, the skills in using the internet for online shopping are proxied already by the core item on the frequency of use of internet discussed above.

With respect to ability to make simple numerical calculations required frequently when shopping, examples of such questions from other surveys such as the US FTC survey on consumer fraud from 2013 and the Eurobarometer survey on consumer empowerment from 2010 are provided in Box 15.³³

Box 15 Consumer shopping skills and style – examples of questions

- Numerical skills

“Using a scale of 1 to 7, how would you rate your ability to work with numbers? An answer of 1 means that you are really bad with numbers, while a 7 means that you are really good with numbers. How would you rate your ability to work with numbers?”

“During a sale, a store is selling all items at half price. Before the sale, you had admired a sofa that cost \$600. How much would you have to pay to buy the sofa during the sale?”

“A used car dealer is selling a car for \$10000. This is two-thirds of what the car cost new. How much did the car cost when it was new?”

“Let’s say you have \$200 in a savings account. The account earns 10 percent interest per year. How much will you have in the account at the end of two years?”

(US FTC Fraud Survey, 2011, Q87a, Q87b, Q87d, Q87f)

QA42: “The same flat screen TV is on sale in both shop A and shop B. In shop A, the price is €500 but a discount of 10% is offered. In shop B the price is €400. Which one is cheaper?”

QA44: “A family is charged interest at 6% per year on a 50000 euro home loan. How much is the interest for the first year?”

(Special Eurobarometer 342 Consumer Empowerment, 2010, QA42 and QA44)

The updated EC questionnaire for consumers introduces also a new module question on numerical skills of respondents (Q20), question which improves upon one of the examples from the Eurobarometer survey on consumer empowerment above. The first option in Q20 tests the respondents’ ability to calculate percentages, while the second option tests their ability to make simple but quick subtractions. On this basis, a measure of consumer numerical skills can be defined as the percentage of consumers who answer both questions correctly. Alternative measures include either the percentage of consumers who give a correct answer to either of the two questions, or simply the average of the percentages of consumers who answer correctly each of the two questions. Given the novelty of the question in the survey, in a first instance, we recommend the analysis of all the three measures.

³³ Asking this type of questions, however, may make respondents feel uneasy, as if they are being tested. Therefore, such questions are best placed at the end of the questionnaire.

MODULE Question Q20 Consumers**Issue: Numerical literacy**

Suppose that the exact same product is on the sale in shop A and shop B. The two shops are next to each other. I will read you two statements about offers from shop A and shop B. In each case, please tell me which one is cheaper?

1. Shop A offers a TV set for 440 euro. Shop B, next door, offers the exact same type of TV set at 500 euro, but with a discount of 10%
2. Shop A offers a TV set for 890 euro. Shop B, next door, offers the exact same type of TV at 940 euro, but with a reduction of 60 euro.

The third new module question introduced in the updated framework refers to the abilities of consumers to use foreign languages for shopping purposes and other private uses. The question is designed to help analyse the extent to which insufficient knowledge of foreign languages may deter consumers from shopping cross-border in the EU.

MODULE Question Q18 Consumers**Issue: Languages**

Which languages can you use comfortably for personal interests (such as shopping, searching the web or other uses)?

List of 29 languages

For retailers, the core items included in the updated framework correspond largely to the questions included in the Eurobarometer survey 359. The changes implemented in the updated questionnaire relate to the following three survey items. First, the question on the destinations for cross-border sales is amended such that the answers now reflect the EU countries where the respondent makes cross-border sales (question D2).

CORE Question D2 Retailers**Issue: Experience with cross-border sales**

Besides [OUR COUNTRY], to which EU countries do you currently make cross-border sales to final consumers?

List of codes for EU countries

No other EU country [OUR COUNTRY]

Second, the question on sales channels from the Eurobarometer survey 359 is adapted such that it allows for a clear distinction between e-commerce and purchases via mobile applications.

CORE Question D4 Retailers**Issue: Retail channels used**

Do you use the following sales channels for retail?

1. E-commerce
2. Mobile commerce (i.e. the buyer makes the purchase via special applications on mobile devices like smartphone or tablet)
3. Telesales / call centre (excluding e-commerce, e.g. phone sales, TV shopping)
4. Sales representatives visiting consumers at their homes

- | |
|--|
| 5. <i>Direct retail sales (i.e. shop)</i>
6. <i>Other</i> |
|--|

Third, the updated questionnaire for retailers introduces two new questions that help elicit data on the retailers' experiences with respect to online shopping domestically, cross-border within the EU, and outside the EU.

CORE Question D5a Retailers	Issue: Experience with online sales
Please tell me which of the following statements apply to you?	
Multiple choice:	
1. <i>You sell online to final consumers in [OUR COUNTRY]</i>	
2. <i>You sell online to final consumers in other EU countries</i>	
3. <i>You sell online to final consumers in other non-EU countries</i>	
And the similar question D5b.	

In the flexible component for retailers, we propose the introduction of additional details on company's history and activity such as the age of the company, the sector of activity, type of ownership, the existence of a company website, and the relative share of its cross-border business. As discussed briefly in the following chapter, these company characteristics would enable a more detailed analysis of correlates of company's perceptions and experiences with respect to consumer conditions mentioned in the three dimensions of the framework.

Moreover, in addition to the data that can be collected based on the EC surveys of consumers and retailers, the analysis of consumer conditions can be supported also by data from other EU surveys. The two surveys EU-SILC (the EU Survey of Income and Living Conditions) and ICT (EU Surveys on ICT usage and e-commerce for consumers and retailers) are carried out regularly in all Member States, and they can be used to monitor aggregate indicators related to consumer conditions across the EU. Such indicators include, for example, measures of poverty, material deprivation, and household financial difficulties (based on EU – SILC), and experiences with online trading and types of products traded online, methods of online shopping, and turnover from online sales (based on EU ICT). Further analyses of these data sources will be included in a future companion report.

1.5.4 Avenues of analysis

The conceptual framework introduced above enables the estimation of two main sets of composite indicators for domestic transactions: a set of three summarizing indicators on knowledge / awareness/ trust; compliance and enforcement; and complaining and redress for consumers, and a similar set of summarising indices for businesses. With respect to cross-border transactions, the framework includes a set of indicators calculated at EU levels across similar dimensions.

The two coordinates of analysis used in this research design include: 1) the type of transactions (domestic and cross-border), and 2) the type of market participant (consumer and business). These axes can be used to develop the following six main directions of research:

- 1) Analysis of the integration of the EU Single Market based on the data on cross-border transactions for consumers and retailers.
- 2) The comparison of the positions of Member States with respect to each dimension of domestic transactions for consumers and retailers.
- 3) A clustering analysis of countries based on all the three dimensions combined.
- 4) An analysis of perceptions and experience of vulnerable consumers in each country.
- 5) An econometric analysis of the main correlates of perceptions and experiences of consumers and retailers across the EU.
- 6) An estimation of regional aspects of consumer conditions in EU Member States.

The analysis of Single Market integration helps unravel the extent of development of cross-border trade with goods and services in the EU, the confidence of market participants in pursuing these transactions, as well as obstacles that may prevent consumers and retailers from taking full advantage of a common market. A more detailed analysis of groups of consumers and businesses that are more likely to trade cross-border can be developed along characteristics of respondents such as consumers' age, education, use of internet, use of foreign languages, and numerical skills, on the consumer side, and characteristics of businesses such as sector of activity, years in business, size, and availability of company website, on the retailer side.

With respect to domestic transactions, data collected at the micro level allows for an in-depth analysis of each of the three main dimensions of consumer conditions envisaged in the framework. For the first dimension of knowledge/ awareness/ trust, for instance, we can compare the perceptions of consumers with the ones of businesses, and also analyse the position of each Member State across the two-dimensional space of high/low knowledge/awareness/ trust for consumers and the high/low levels of corresponding indicators for businesses. A similar analysis can be developed separately for each dimension in order to reflect strengths and weaknesses in consumer conditions in each EU country.

Subsequently, the analysis of dimensions can be complemented with a clustering analysis of consumer conditions in EU countries across all three dimensions. This type of analysis helps reflect the coherence of national strategies with respect to consumer protection, best approaches in the field, as well scope for improvements in each country. When coupled with methods of sensitivity and uncertainty analysis, this empirical strategy would also have the advantage to address empirical issues such as sample size issues, missing data, survey errors and, ultimately, the robustness of country rankings.

The updated framework also supports a more detailed analysis of perceptions and experiences of vulnerable consumers in EU Member States – an issue high on the international agenda on consumer protection. As discussed in the previous chapters in this report, the vulnerability of consumers is delimited by age, physical and mental impairments, a precarious financial situation, levels of education, and exclusion from labour market. We propose the inclusion of direct measures and, if direct observation is not feasible empirically, of proxies for these characteristics in order to enable the analysis of consumers' perceptions and experiences with respect to such vulnerabilities that may weaken their negotiating positions in interactions with retailers.

Econometric analyses of correlates of the three dimensions in the framework can be developed at two levels: 1) the micro level, with a separate focus on consumers and businesses, and 2) the country level, based on the survey data aggregated at the macroeconomic level. The micro level analysis serves to analyse the propensity of given perceptions and experiences (for example, confidence in online shopping) with respect to individual characteristics, and location and other

proxies of the transacting environment. The country level analysis, on the other hand, can help estimate the correlations of components of consumer conditions with other economic and social indicators at the macro level.

Finally, building on the econometric analysis of correlates of consumer conditions at the country level, the regional dimension of consumer protection can be estimated by using methods of small area estimation. Depending on the sample composition, these methods help circumvent the empirical issue of limited effective sample size at regional level by using observed correlations at the country level in order to strengthen estimates of regional aggregates. Given the dearth of reliable regional estimates of indicators of consumer protection, this type of analysis has a significant potential for the provision of a detailed informed picture of differences in consumer conditions across EU regions.

1.5.5 Conclusions

In this chapter we introduce the updated framework for measuring the general consumer conditions across the EU Member States and discuss the changes implemented in the new questionnaires for the EC surveys of consumers and retailers on this basis.

The design of the updated framework builds on the 9th edition of EC Scoreboard for Consumer conditions published in 2013, and it has been inspired by reviews of the key concepts relevant in field and the overview of country-level surveys of consumer conditions developed internationally. The framework features three main summarizing dimensions of consumer conditions, and it is designed to enable both the monitoring of general trends in the consumer environment over time, and a regular updating of the analysis based on the most recent market and regulatory trends.

The main conceptual strength of the framework is reflected by the four main criteria underlying its construction. First, the framework entails a symmetric measurement of aspects of consumer protection for both consumers and retailers. This enables a balanced representation of perceptions and experiences of both sides of the market. Second, to the extent possible and relevant, the three general dimensions of consumer conditions include similar issues for domestic

and cross-border transactions. This way, it becomes possible to contrast the experiences of consumers and retailers with domestic transactions in national markets with their experiences with cross-border transactions in the EU single market. Third, given the constraints inherent in surveys of general purposes, the measurement framework now includes a permanent (core) component that can be used for monitoring consumer conditions over time, and a flexible part that can be adapted to topics of current policy interests. Fourth, in order to enable an in-depth analysis of vulnerable consumers, the framework is complemented with additional issues that reflect skills and behavioural factors relevant for individuals' experiences and perceptions in the trading environment.

Moreover, the chapter discusses at length the revised questionnaires for consumers and retailers that will be implemented for the next edition of the EC Scoreboard of Consumer Conditions to be published in 2015. These questionnaires follow closely the main criteria underlying the new framework, while still maintaining the comparability with the previous edition of the EC scoreboard to a significant extent, and they are the result of consultations between the JRC, the Consumers Directorate of DG Justice and Consumers, experts from Member States, and other EC services. Throughout the chapter we present the items included in the updated questionnaires for the next EC surveys of consumers and retailers, explain the improvements implemented in the two EC surveys relative to the Eurobarometer surveys 358 and 359 underlying the 9th edition of the EC Consumer Conditions Scoreboard from 2013, and discuss the possibilities to derive quantitative measures of consumer conditions on this basis.

2 EC surveys on consumers and retailers: an empirical investigation

2.1 Literature review and multivariate analyses

Fiammetta Rossetti and Vincent Van Roy

This chapter provides a concise overview of the literature exploring the heterogeneity of consumer conditions across consumers with different socio-demographic characteristics, attitudes and personality traits. In line with this literature, some empirical models are proposed for future investigations on new EC data from consumer and retailer surveys.

2.1.1 Consumers' characteristics and their market exposure

Consumers' attitude toward consumption is partly shaped by their characteristics or demographics such as age, disability, gender, race/ethnicity, literacy, and level of education (Jones and Middleton, 2007). Based on these variables governments frame and implement vulnerability-oriented policies. An exhaustive review and discussion of the drivers of vulnerability is contained in the forthcoming report on "Consumer vulnerability across key markets in the European Union" by London Economics, Ipsos, and VVA Consulting. Yet also in less recent times vulnerable consumers were already recognised as those "more susceptible to economic, physical, or psychological harm in, or as a result of, economic transactions because of characteristics that limit their ability to maximise their utility and wellbeing" (Smith and Cooper-Martin, 1997). Thus, the vulnerable consumers are the most defenceless and the least skilled with respect to the damages caused by frauds. Their lack of competence takes place at different levels, so it can be related to cognitive abilities, to knowledge, to experience, or other factors that prevent them from formulating efficient consumption decisions (Hill, 2002; Lunn and Lyons, 2010; Nwachukwu et al., 1997). In terms of methodologies, Lee and Soberon-Ferrer (1997) use an ordered-logit model to analyse which group of people is more susceptible to consumer fraud. They find that heterogeneity in consumer vulnerability is mainly based on cognitive deficiency and on social interaction. Cognitive limitations are caused by external factors like aging, mental illness, etc. (European Parliament, 2011). Social interaction instead explains vulnerability with the asymmetry between social relationships and social isolation. Lee and Soberon-Ferrer (1997) employ an index of consumer vulnerability as dependent variable arguing that this index is a better proxy for the consumers' propensity of being a victim compared to reported victimisation

experiences, since the more vulnerable consumers are less willing to report their experiences. The index is based on twelve survey questions about consumer issues with the potential of increasing the vulnerability to fraud (e.g., lack of knowledge of the consumer rights, the lack of information sources). The choice of the underlying measures of the index rests on the empirical literature of consumer vulnerability, but its empirical validity is tested with a principal component analysis. Their final results confirm that individuals who are older, poor, less educated and single are more vulnerable to fraud.

Among the individual characteristics, age and its relationship with vulnerability/victimisation attracted particular attention by the literature but evidence is somewhat mixed (London Economics, et al., forthcoming). Conditional on the distinction between who is most often victimised and why certain types of individual are victimised, age is found to reduce the likelihood of being victimised when the “social aspects of age” are taken into account (Van Wyk and Mason, 2001). Younger people have a more intense social life that exposes them to frauds and unfair commercial practices (London Economics, et al., forthcoming). These results are quite often reversed by other investigations where age is rather found to be a feature of vulnerable consumers. For example in the context of telemarketing, age affects consumers precisely by the opposite argument of before. The lack of social activity, loneliness, and social isolation (Alves and Wilson, 2008; Lee and Geistfeld, 1999) let elderly people use interactions in the market place as a substitute for social relationships and are more exposed to frauds. Recently the puzzle became more complete and age started to be considered the outcome of three simultaneous processes: biological, psychological, and social (Moschis et al., 2011). In this broader perspective older people have reasons to be more vulnerable due to declines in their body functions, in their mental resources, and in the social relevance that the surrounding society assigns to them. At a cognitive level, new work was developed to understand how consumers of different age perceive potential threats coming from negative marketing events about products (Silvera et al., 2012). Older consumers seem to perceive themselves less susceptible to product harm crises despite the fact their vulnerability increases with age as if they did not recognise the cognitive and physical declines associated with their aging. As a consequence, cognitive vulnerability, as much as other vulnerabilities, deserves a deepening when characterising the vulnerability of consumers.

Moreover, products' similarity can mislead consumers' purchasing decisions. Any consumer – not only those of a certain demographic profile or with a recognisable disability – can experience loss of utility when having to choose among a number of seemingly equivalent situations, including those where they are exposed to unethical means of marketing, or are required to make choices under pressure. For example, consumers with higher education are not necessarily less prone to be victim of deceptive imitations of products, and incur into the consequent utility loss. Therefore socio-demographic variables – that are used in the majority of the papers within this field – fail to capture soft aspects of consumers when it comes to measure the degree of confusion they may fall into when choosing among similar product (Walsh and Mitchell, 2005). Moreover, external conditions - such as distribution of resources or logistical elements - can also contribute to vulnerability (Baker et al., 2005).

Also online shopping affects higher educated (/high-income) individuals as well as lower educated (/low-income) ones (London Economics, et al., forthcoming). When analysing internet frauds, gender differences or heterogeneity related to rural versus urban residents also disappear in such a way that the demographic characterisation carried out for vulnerability in general may be not any longer useful to deal with the new frontiers of shopping and fraud (Van Wilsem, 2013). In several European countries online purchases became more and more widespread allowing easier and cheaper access to goods, but exposing consumers to additional factors of fraud victimisation (e.g., fee fraud, price promotion fraud, pyramid scheme fraud, delivered products not matching with the initial description).

With respect to the other side of the market - the producers and retailers - complaints from unsatisfied consumers are important sources of information since through these feedbacks attempts to solve the failures can be made to improve the supply (Phau and Sari, 2004). The successful handling of complaints is fundamental for firms to retain their consumers as dissatisfied consumers that insert a complaint seem to be more loyal and have a higher likelihood of repurchasing intention than those who did not complain (Lau and Ng, 2001). Second, it provides firms valuable inputs to enhance their marketing strategies and reduce negative word-of-mouth communication among consumers (Griffin et al., 1991). However, the number of

complaining consumers consists only of a minor part of the population. Consequently, it would be inappropriate from firms' side to solely base the feedback on this minority group. Hence, a vast majority of studies have investigated the various characteristics that can explain the differences between complainers and non-complainers (Schoefer and Enew, 2003).

A first group of factors that influence the propensity to complain are consumers' demographics and their socio-economic status. Prior studies showed that consumers giving voice to their dissatisfaction through complaining procedures are more often younger, with higher education and income levels (Phau and Sari, 2004; Keng et al., 1995; Barnes and Kelloway, 1980; Day and Landon, 1977).

A second series of factors affecting complaint behaviour to which literature gave particular attention relates to the psychographic traits of consumers. These variables attempt to gauge the personality and attitudinal characteristics of consumers by including among others measure of self-confidence, impulsivity, assertiveness, social involvement, and risk aversion. Consumers with higher self-confidence – i.e. a higher self-assuredness in their overall competences - are more likely to engage in complaint behaviour (Keng et al., 1995). Consumers characterised by high impulsivity, i.e. a strong tendency to act and take decisions without prior reflection on the consequences, tend to complain (Sharma et al., 2010). A similar relationship is found for consumers that are more assertive therefore more willing to give voice to their dissatisfaction (Daerden and Mason, 1994; Kowalski, 1996; Richins, 1982). Harris and Mowen (2001) support these findings with an empirical analysis suggesting that the propensity to complain is positively associated with extraversion and conscientiousness. In addition, more socially responsible individuals are often found to have higher propensity to complain for altruistic reasons since they are confident that their complaint will help other people (Lau and Ng, 2001). Finally, complainers tend to be more risk assertive than non-complainers (Keng et al., 1995; Rubin and Brown, 1975).

While the analyses mentioned before focus mainly on broad personality types, other studies try to expand the characterization of complainers with more specific and sophisticated traits of personality like self-monitoring, self-control, consumer politeness and emotions (Kowalski,

1996). The concept of self-monitoring was elaborated within the social psychology to express the tendency of individuals to conform their behaviour to the behaviour of other people (Bercherer and Richard, 1978). A person with a low level of self-monitoring is “truer” than a person with a high self-monitoring because he is less sensitive to the attitude of the others, therefore more inclined to follow his own beliefs and convictions. The latter type instead tends to adjust his behaviour because more predisposed to the influence of external factors and social pressure. Studies analysing the complaint behaviour of both these types of personality find that subjects with high self-monitoring complain less (Sharma et al., 2010; Bodey and Grace, 2006; Bearden and Crockett, 1981). Lerman (2006) finds that consumer politeness is negatively correlated with complaining behaviour, implying that impolite consumers tend to complain more.

A third set of factors considered by literature is about the attitudes and the expectations towards complaining.³⁴ The attitude towards complaining is based on beliefs, knowledge and evaluations of the estimated cost and perceived benefits of complaining (Sing and Wilkes, 1996; Bearden and Crockett, 1981). The perceived benefits of complaining should be sufficient to guarantee the effort to complain. The cost of complaining is a function of various parameters, including the time involved for resolving the problem, the search for complaining channels and past experiences with complaints. Consumers that are more involved in the use of a product or service are more willing to devote time and resources in the search for redress (Sharma et al., 2010).

Moreover, people who feel that they were well treated during the complaint handling process are less likely to complain in future purchases (Voorhees and Brady, 2005; De Matos et al., 2009). In addition, individuals who believe to have a high chance of success if they take action are more likely to voice their dissatisfaction. These types of person generally maintain a positive attitude from their complaining behaviour and tend to engage less in negative word-of-mouth communication (Blodgett et al., 1995).

³⁴ Various studies have paid particular attention to the moderating role of consumer attitudes towards complaining by exploring the interaction effects of this variable with other explanatory indicators as impulsivity and self-monitoring (e.g. Sharma et al., 2010; De Matos et al., 2009).

A limited number of studies investigated the complaint behaviour in online shopping (e.g. Cho et al, 2002; Wu and Huang, 2013). Cho et al. (2002) compares the propensity to complain of offline and online consumers. Overall, they find that online consumers are less likely to engage in complaints, even for higher levels of dissatisfaction with respect to offline consumers. Wu and Huang (2013) use structural equation modelling to relate indicators of perceived justice and of fair treatment in online shopping to consumers' satisfaction and complaint intentions. They find that consumers with higher perception of justice are more satisfied, and this higher satisfaction lower in turn their propensity to complain.

Table 26 summarises selected studies from the existing literature, their objectives, methods, and results.

Table 26 Selected papers on consumer conditions: a summary

Authors	Research Question	Methods/Techniques	Main Findings
Alves, L. M., & Wilson, S. R. (2008)	Using data about the relationship between telemarketing fraud and loneliness among a sample of older adults, they study the impact of loneliness on telemarketing fraud susceptibility.	Descriptive research on survey questions made of 40 items about demographics and loneliness.	Telemarketing fraud is a relevant issue for the older population, especially among lonely older adults.
Anderson, K.B. (2013)	Analysing the relationship between consumer characteristics and the likelihood of being a victim of fraud.	Survey on consumer fraud experienced in the United States in 2011 (3638 respondents). Multivariate analyses linking fraud occurrences to demographic and socio-economic characteristics.	Consumer victims of fraud are more willing to take risks and to engage in risky purchasing, less patient. Consumers that had a serious negative life event were more prone to victimisation.
Baker, S. M., Gentry, J. W., & Rittenburg, T. L. (2005)	They try to clarify the boundaries of consumer vulnerability for research and policy reasons.	They propose a theoretical conceptual model to define what "consumer vulnerability" is and what it is not.	They conclude that 'consumer vulnerability is a condition, not a status'. That some classes of people are more exposed to vulnerability does not mean that those people are always vulnerable. Since the experience of vulnerability is not an equilibrium status, then research and policy should facilitates the movement from situational vulnerability and the empowerment of consumers.
Barnes, J.G. and Kelloway, K.R. (1980)	Examining the difference between consumerists (i.e. members of a consumer association) and other randomly chosen consumers in their attitude towards consumer issues.	Surveys of 522 consumerists and 499 random consumers and basic cross tabulation tables to compare both groups.	Consumerists are more likely to complain and to use information source about consumer rights. They are also more prone to express their satisfaction in case complaint handling is getting solved.
Bearden, W. O., & Crockett, M. (1981)	Exploring the relationship between personal characteristics, past satisfaction and information seeking on the propensity to complain in the automobile repair and service sector.	Two-stage sampling process. First stage surveying consumers that recently inserted complaints and a second stage questionnaire surveying random adult car owners.	Findings show that past satisfaction and personal competences (i.e. similar to self-control) positively influence the propensity to engage in complaint behaviour.
Blodgett, J.G., Wakefield, K.L. and Barnes, J.H. (1995)	They present a dynamic model of consumer complaining behaviour with a comprehensive overview of the whole complaining process.	They use survey data to distinguish between the negative word-of-mouth behaviour before redress-seeking and afterward.	Dissatisfied consumers with a positive attitude towards complaining and higher beliefs in a successful problem solving, are more likely to search for redress and less prone to spread negative word-of-mouth before the redress.
Bodey, K., & Grace, D. (2006)	They define profiles for "complainers" and "non-complainers" with respect to services in order to understand consumers' characteristics that either cause or prevent the complaining behaviour.	Survey data were used to measure personal traits (i.e. perceived control, Machiavellianism, self-monitoring, self-efficacy) and attitude toward complaint. The multivariate analysis of variance (MANOVA) was used to select predictor variables for the discriminant analysis.	Complainers perceive higher levels of control over the environment and tend to be low self-monitors with respect to non-complainers. Service firms should take this information into account to analyse their complaint processes in order to maximise the likelihood of customers complaining in the event of service failure.
Cho, Y., Im, I., Hiltz, R., & Fjermestad, J. (2002)	They study the effects of post-purchase evaluation factors on the propensity to complain in online- versus offline-shopping.	Survey of 161 US students exploring their negative experiences and complaining behaviour for online and offline purchases.	The paper finds that online customers are more likely to complain than offline customers for a same level of benefit, and less likely to complain for a same level of cost. Moreover, customers show stronger personal competence offline than online. Finally, online customers show higher propensity to complain when responses by the seller are delayed.

Table 26 Selected papers on consumer conditions: a summary (cont.)

Authors	Research Question	Methods/Techniques	Main Findings
De Matos, C. A., Rossi, C. A. V., Veiga, R. T., & Vieira, V. A. (2009)	They study how the severity of service failure and company responsiveness affect consumer satisfaction, and in turn how satisfaction influences repatronage intentions, word-of-mouth, and complaint intentions. In addition, they consider how consumer attitude toward complaining moderates these relationships.	Multivariate analyses based on survey responses of 204 university students in Brazil. Multigroup analysis in structural equation modelling to test direct and indirect effects on complaining behaviour.	They demonstrate that the attitude toward complaint (ATC) is a significant moderator, especially when service recovery and complaining intentions come into play.
Harris, E. G., & Mowen, J. C. (2001)	They investigate the possibility that a set of personality traits underlie dispositions to bargain and to complain.	Hierarchical model of personality dealt with through structural-equation modelling techniques.	Bargaining proneness is positively influenced by materialism and negatively by agreeableness. Complaint propensity is positively influenced by extraversion and conscientiousness.
Lee, J., & SOBERON-FERRER, H. O. R. A. C. I. O. (1997)	Exploring which consumers are more vulnerable to consumer fraud	Data: survey of 957 US adults older than 18 year. Ordered logistic model with consumer vulnerability index as dependent variable	Older, less educated and single or widowed consumers are most vulnerable to fraud. Gender and race are not significant, while the impact of income is marginal.
Moschis, G. P., Mosteller, J., & Fatt, C. K. (2011)	They suggest the employment of more complete measures of consumer vulnerability in relation to consumer welfare.	They make a survey of existing literature and methods.	They discuss appropriateness and usefulness of methods and findings, and their policy implications.
Phau, I., & Sari, R. P. (2004)	Exploring the differences of consumer demographics, psychographics and attitudes towards complaining and businesses between complainers and non-complainers in Indonesia.	Correlation analyses between complainer and non-complainer groups based on responses of 272 surveys	Complainers are more likely to have a higher level of income and education. They exhibit more self-confidence and are prone to take more risk.
Richins, M. (1982)	Explores the association between attitudes towards complaining and the actual complaining behaviour of consumers	Principal component analyses and multivariate models based on survey responses.	Individuals with more positive attitudes towards complaining are more likely to complain. However, authors point that causal direction can also be reversed as they base their analysis on correlations.
Silvera, D. H., Meyer, T., & Laufer, D. (2012)	They examine the differences between older and younger consumers when reacting toward product harm crises.	They built up a system of hypotheses that they test by performing the analysis of variance (ANOVA) on survey data.	Older consumers perceive product harm crises as less threatening, tend to blame less on the company, and have stronger intentions to purchase and recommend the product involved in the crisis.
Sharma, P., Marshall, R., Alan Reday, P., & Na, W. (2010)	They investigate the reasons for which some customers complain and others do not in similar dissatisfaction situations. They combine customers' characteristics (i.e. impulsivity and self-monitoring) and situational factors (i.e. dissatisfaction and involvement).	They test their hypotheses by applying the method of "critical incident technique" on survey data. Moreover, they use Crombach's alpha and analysis of variance (ANOVA).	Consumer complaint behaviour (CCB) is positively associated with involvement and impulsivity, but negatively with self-monitoring. Involvement and impulsivity positively moderate the association between dissatisfaction and CCB, and self-monitoring moderates it negatively.
Van Wilsem, J. (2013)	They focus on Internet consumer fraud and combine insights from self-control theory and routine activity theory.	They use longitudinal data from a Dutch online survey to perform a bivariate analysis.	Victims of online fraud are prevalently young. Impulsive consumers are more active on Internet, and spend more time buying online.
Van Wyk, J., & Mason, K. A. (2001)	They study vulnerability to fraud and reporting behaviour of consumers in relation to socialisation.	They use data from a telephone survey in Tennessee. Descriptive statistics, bivariate analysis and logistic regressions are performed on the variables of interest.	They find evidence that the higher the amount of social contacts, the greater the opportunities for victimisation. On the contrary, no support is found for the positive relation between socialisation and official reporting behaviour.
Wu, I. L., & Huang, C. Y. (2014)	They examine the determinants of complaint intentions in the online shopping.	Survey data were used to test ten hypotheses through an expectation–confirmation model.	Both justice and technology are critical in explaining consumer's complaint intentions in online shopping. Procedural justice has a less important role, while perceived justice is quite relevant.

2.1.2 Multivariate analyses on the EC consumers' and retailers' surveys

In what follows we provide an overview of the empirical analyses that we perform on the EC consumers' and retailers' surveys. We briefly present the models that are feasible according to the literature just discussed. Second, we investigate to what extent demographic and socio-economic characteristics shape consumers' and retailers' conditions on different aspects. While prior work described in the literature employs only survey or experimental data on limited scales at country levels, the EC surveys allow for an EU-wide investigation across countries.

2.1.2.1 EC consumer survey

In line with the literature on consumer conditions (e.g. Moschis et al., 2011; Van Wilsem, 2013, Phau and Sari, 2004; Bodey and Grace, 2006; Sharma et al., 2010), we perform multivariate analyses to examine which individual and socio-demographic characteristics are associated with several consumer conditions related to victimisation, complaining behaviour, consumers' knowledge of the legislation, consumers' online purchasing behaviour and consumers' trust and confidence. With the data of the EC consumer survey, empirical investigations can be conducted for at least two types of models³⁵:

- **ogistic models:** The dependent variable is a binary variable indicating whether a consumer has been a victim of consumer fraud or not. This variable takes the value of 1 if the respondent experienced consumer victimisation, and 0 otherwise.
- **Count models:** A second type of model can be used to determine to what extent consumer characteristics are associated with the amount of market exposure related to aforementioned issues.

Explanatory variables in the models include consumers' socio-demographic characteristics like age, gender, employment level and income (Lee and Soberon-Ferrer, 1997; Moschis, 2011). These variables are found to be highly significant in the literature. The consumers' likelihood to complain tends for instance be higher for male, older, better educated and high-income earners

³⁵ In addition to multivariate analyses, we conduct cluster analysis on different groups of consumers (based on above and below means of gender, age, and financial situation) with respect to consumer conditions. The results did not reveal particular patterns in line with the regression analyses. A higher degree of heterogeneity in the group classification would probably lead to more insightful results.

(Keng et al., 1995; Barnes and Kelloway, 1980). As the EC consumer survey does not provide detailed income levels of respondents, we use a variable based on the answer of question 19 as proxy for the household income situation. This variable is a dummy indicating if respondents find it very to fairly difficult to meet the end of the month can proxy. In addition, we incorporate a variable that measures the level of urbanization where respondents are living as a measure for consumers' exposition to higher opportunities of consumption.

Furthermore, literacy and numerical skills are important factors in decision making and assimilation of consumer knowledge. More particularly related to victimisation, Anderson (2013) suggests that the numerical skills of consumers influence the likelihood of being a victim. Consumers with lower numerical skills have a higher propensity to be victimised. We proxy the numerical skills of respondents with their answer to question 20 in which they are asked to find the correct answer on a simple calculation.

Cultural differences, ethnicity and language barriers may have important impacts on how consumers experience and expose themselves in the market (London Economics, et al., forthcoming). As a proxy for communication skills we include the amount of language respondents can speak comfortably (based on question 18). In addition, we incorporate a dummy indicating whether the respondent has a mobile phone as this variable can proxy for his electronic skills and for his social connectivity³⁶.

Awareness and knowledge of consumer rights can help to better assess selling conditions and hence it can have an important influence on consumers' propensity to complain, to be victimised and on consumers' trust in authorities. Hence, we include a variable that measures individuals' knowledge of consumer legislation (based on question 6, 7 and 8).

The trust, knowledge and behaviour of consumers are also shaped by their perception of the easiness to settle disputes with retailers and service providers. In this respect, we expect for

³⁶ It can be questioned whether the possession of a mobile phone is a valid proxy of electronic skills and social activity since its penetration in most of the EU countries is above 100%. A better alternative might be the use of smartphones whose penetration rates in Europe are significantly lower. Future waves of the questionnaire may encompass a question about the possession of a smartphone in place of the one about the use of mobile phones.

instance a negative association between this indicator and the propensity to engage in complaining behaviour. To proxy for this we include two dummies indicating the agreement of respondents on the ease of settling disputes through court and out-of-court bodies.

Finally, we include a set of country dummies to control for geographic or cultural differences.³⁷ We included 27 country dummies while the United Kingdom is used as reference country.

Table 27 provides the definitions of the variables that are used in the multivariate analyses for the EC consumer surveys, while summary statistics are described in Table 28.

³⁷ Exploration of cross-cultural differences has received limited attention in the literature due to the lack of cross-country survey comparisons. Two exceptions are studies of Liu and McClure (2001) and Sharma et al. (2010) in which the complaint behaviour is compared across several countries.

Table 27 Definitions of variables used for multivariate analyses of the EC consumer survey

Variable	Based on question	Definition	Sample	Why we include it in the model
Consumer complaint	Q10	Number of complaint actions taken	All purchases Within country purchases Outside country purchases	Measure for the complaint actions
Consumer victimization	Q13	Count variable of experience with UCP		Experience with UCP
Knowledge of consumers' rights	Q6/Q7/Q8	Total number of right answers on these questions		Proxy for consumer awareness and knowledge
Trust in authorities	Q3	Trust in public authorities Trust in retailers and service providers Trust in non-governmental consumer organisations	All purchases Within country purchases Outside country purchases	Consumers' trust
Online purchases	Q1	Dummy indicating whether consumer did online purchases in last 12 months		Consumers' experience with online purchases
Confidence in buying online	Q17	Dummy for confidence in buying online		Consumers' trust in online purchases
Confidence in cross-border selling	Q2	Dummy if consumer is confident in cross-border selling		Consumers' trust in cross-border sales
Age	D1	Age of the respondent		Proxy for experience (see literature)
Gender	D2	Dummy indicating whether a consumer is from the male gender		
Employment	D5	Self-employed/Employee/Manual worker/Without a professional activity		Proxy for social standing of the consumer
Urbanisation	D13	Dummies indicating the urban level where respondents' are living (rural is baseline)		Measure of consumers' exposition to higher opportunities of consumption
Numerical skills	Q20	Dummy 1 if the answer is correct, 0 otherwise		Literacy and skilfulness in decision making related to purchases
Number of languages spoken comfortably	Q18	Variable indicating the number of languages that a consumer can use confidently		Proxy for communication skills
Financial difficulties	Q19	Difficulties in meeting monthly financial obligations: dummy 1 if very and fairly difficult, 0 for others		Proxy for income level
Mobile phone	D18	Dummy indicating whether a consumer has a mobile phone		Proxy for electronic skills, but also for social activity of the consumer
Easiness to settle disputes	Q3 (item 4 and 5)	Two dummies indicating consumers' perception about the easiness to settle disputes through court and out-of-court bodies		Measure for consumers' perception for the cost of complaining
Country dummies	D01	Dummies per country (UK is baseline)		Measure of cross-cultural differences

Note: Knowledge of consumers' rights, online purchases and trust in authorities are also used as explanatory variables in several regressions.

Table 28 Summary statistics for the variables used in the multivariate analyses of the EC consumer survey

Variables	Type	Reference survey question	Obs	Mean	Std.Dev.	Min	Max
Complain (count)	Dependent / Count	Q10	5,495	0.87	0.67	0	5
Victim (count): all	Dependent / Count	Q13	28,082	1.34	1.41	0	10
Victim (count): domestic	Dependent / Count	Q13	28,082	1.15	1.24	0	5
Victim (count): EU	Dependent / Count	Q13	28,082	0.20	0.56	0	5
Knowledge of consumer rights	Dependent / Count	Q6 / Q7 / Q8	27,970	1.27	0.90	0	3
Trust: public authorities	Dependent / Dummy	Q3	27,054	0.62	0.49	0	1
Trust: retailers and service providers	Dependent / Dummy	Q3	26,881	0.72	0.45	0	1
Trust: non-governmental consumer organisations	Dependent / Dummy	Q3	25,561	0.64	0.48	0	1
Online purchases (total)	Dependent / Dummy	Q1	21,616	0.58	0.49	0	1
Online purchases (domestic)	Dependent / Dummy	Q1	21,616	0.47	0.50	0	1
Online purchases (abroad)	Dependent / Dummy	Q1	21,616	0.25	0.43	0	1
Confidence: buying online (total)	Dependent / Dummy	Q17	23,733	0.37	0.48	0	1
Confidence: buying online (only in own country)	Dependent / Dummy	Q17	23,733	0.26	0.44	0	1
Confidence: buying online (only abroad)	Dependent / Dummy	Q17	23,733	0.04	0.20	0	1
No confidence in online shopping	Dependent / Dummy	Q17	23,733	0.33	0.47	0	1
Cross-border selling	Dependent / Dummy	Q2	27,969	0.13	0.33	0	1
Age	Independent / Continuous	D1	28,091	52.12	17.64	15	98
Age ²	Independent / Continuous	D1	28,091	3028.28	1813.55	225	9604
Female	Independent / Dummy	D2	28,091	0.58	0.49	0	1
Student	Independent / Dummy	D5	28,091	0.06	0.23	0	1
Self-employed	Independent / Dummy	D5	28,091	0.09	0.28	0	1
Employed	Independent / Dummy	D5	28,091	0.32	0.47	0	1
Retired	Independent / Dummy	D5	28,091	0.33	0.47	0	1
Manual worker	Independent / Dummy	D5	28,091	0.07	0.26	0	1
Small town	Independent / Dummy	D13	28,091	0.37	0.48	0	1
Large town	Independent / Dummy	D13	28,091	0.30	0.46	0	1
Numeric skills (total)	Independent / Count	Q20	28,091	1.35	0.70	0	2
Spoken languages (total)	Independent / Count	Q18	27,757	2.01	1.03	1	10
Financial difficulty	Independent / Dummy	Q19	27,265	0.53	0.50	0	1
English	Independent / Dummy	Q18	28,091	0.57	0.50	0	1
German	Independent / Dummy	Q18	28,091	0.22	0.41	0	1
French	Independent / Dummy	Q18	28,091	0.14	0.35	0	1
Mobile phone	Independent / Dummy	D18	28,091	0.93	0.25	0	1
Ease of settling disputes through out-of-court	Independent / Dummy	Q3	21,191	0.57	0.49	0	1
Ease of settling disputes through Court	Independent / Dummy	Q3	20,889	0.44	0.50	0	1

Table 29 reports the effects that the most relevant covariates exert on key dependent variables.³⁸ All the models used in this table are estimated with Poisson regression methods. The dependent variables investigated in this table are:

1. Complaints: a count variable about the channels through which consumers complain. This variable is built on question Q10 of the survey, and it counts the number of channels each consumer used to put forward her/his demonstrations. The possibilities that were given by Q10 to the surveyed consumers were six, and they were stated as follows: • You complained about it to the retailer/ service provider; • You complained about it to the manufacturer; • You complained about it to a public authority; • You brought the matter to an out-of-court dispute resolution body (ADR) such as an ombudsman, arbitration, mediation or conciliation body; • You took the business concerned to Court; • Other (DO NOT READ OUT).
2. Complaint severity: based on Q10 we also construct a variable containing the complaint severity following the rationale that consumers tend to escalate in their complaint behaviour in case the outcome was not satisfactory. Therefore a typical consumer starts complaining with the retailer, and arrives until court only if forced due a bad complaint handling process and if the problem is important enough to justify this decision. Results and comments of this model are in appendix.
3. Victimization: a count variable for victimisation built on question Q13a that presents the individuals the following five options of victimisation: • You were informed you won a lottery you did not know about, but you were asked to pay some money in order to collect the prize; • You felt pressured by persistent sales calls or messages urging you to buy something or sign a contract; • You were offered a product advertised as free of charge which actually implied charges; • You came across advertisements that the product is available only for a very limited period of time but you finally realized that it was not the case; • You came across other unfair commercial practices.
We distinguish the estimates for being victimised both in one's own country and abroad, for being victimised only in one's own country, and for being victimised only abroad.
4. Consumer rights: a count variable describing how good is the knowledge of consumers about their own rights. This variable counts the number of correct answers among the

³⁸ The regression analyses in this paragraph do not include any variable measuring the education level of respondents. The survey question on educational attainment only provides information about the age of respondents at the time they concluded their full-time education. Since this information does not allow a clear identification of respondents' level of education, we did not incorporate it in the regression models. The inclusion of this variable does not alter regressions results on magnitude and significance of other variables, and it does not have any significant impact itself with a few exceptions for the trust models (positive and significant) and the models on experience in shopping online (positive and significant).

three questions (i.e. Q6, Q7, and Q8)³⁹ that individuals were administrated about this issue.

Given the nature of the dependent variables, the table presents marginal effects of Poisson regressions for count models. The marginal effects have the advantage that they can be given a quantitative interpretation of the estimates, while the coefficient of the regressions would not have a direct interpretability. A limitation of count variables is that they only account for a number of episodes of a given phenomenon, but they do not provide description of the severity of the phenomenon itself (e.g., the problems experienced by the consumers when they complain, the victimisation). The low values of the pseudo R-squared may ingenerate the doubt that coefficient are biased. However, low R-squared values are not uncommon in cross-section analysis, and in case of count and logit models. When plotting the residuals, we do not observe any pattern (i.e. noisy residuals) which is reassuring.

We observe from these estimates that consumers' age is positively and significantly related to complaining, being victim, and knowing consumers' rights. We check for a U-shaped relationship by including the variable age squared. We observe that age (i.e. maturity/awareness) is positively associated with consumer complaints, domestic victimisation, and knowledge until a certain peak before decreasing.

The gender only impacts on victimisation and knowledge. Specifically, women seem to have fewer problems with victimisation but also a lower knowledge of consumer rights. It may be the case that unaware female individuals do not realise when they are victimised, therefore they do not report it.

³⁹ Q6 Suppose you ordered a new electronic product by post, phone or the Internet, do you think you have the right to return the shoes you ordered 4 days after their delivery and get your money back, without giving any reason? (Yes / No / It depends on the product / DK/NA)

Q7 Imagine that a new electronic product you bought 18 months ago breaks down without any fault on your part. You didn't buy or benefit from any extended commercial guarantee. Do you have the right to have it repaired or replaced for free? (Yes / No / It depends on the product / DK/NA)

Q8 Imagine you receive two educational DVDs by post that you have not ordered, together with a 20 euro invoice for the goods. Are you obliged to pay the invoice? (No, and you are not obliged to return the DVDs / No, provided that you return the DVDs / Yes, you are obliged to pay / DK/NA)

Being self-employed is positively and significantly associated only with victimisation. Living in a large town is positively related to the knowledge of consumers' rights. A possible interpretation could be that in larger cities people are supplied with higher amounts of shopping experiences and the consequent information about them.

The number of spoken languages itself is positively and significantly associated with the amount of complaints, and more significantly with the amount of UCP experiences by consumers. Respondents with better communication skills are hence more prone to complain but may be more likely of being victim of UCPs as they are also more exposed to the market.

A situation of severe financial difficulty associates negatively with complaining behaviour and with the knowledge of rights, but positively with the UCP experiences. The knowledge of English is positively linked to domestic victimisation episodes and the knowledge of rights. Also the knowledge of French and the use of a mobile phone are positively associated with domestic victimisation.

The variable accounting for online purchases is positively connected with all the three dependents.

The two covariates accounting for trust are only significant for victimisation with the difference that trust in Public Authorities is negatively related only to domestic victimisation, while trust in Non-Governmental Organisations is negatively associated to both domestic- and foreign-type of victimisation. We reflect on the idea that trust could be an actual measure of perceived quality of Public Authorities and Non-Governmental Organisations, meaning that a lower quality of institutions allows more victimisation.

Similarly, the ease of settling disputes out-of-Court is negatively associated with domestic victimisation, while the ease of settling disputes through Court is negatively associated with both the victimisation types.

Table 29 Multivariate analyses on complaints, victimisation and consumer rights⁴⁰

	Complain (count)	Victim (count)			Consumer rights
		all	domestic	EU	
Age	0.015* (0.01)	0.028*** (0.01)	0.027*** (0.01)	0.000 (0.00)	0.030*** (0.00)
Age ²	-0.000** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)	-0.000 (0.00)	-0.000*** (0.00)
Female	0.028 (0.03)	-0.106*** (0.03)	-0.043* (0.02)	-0.062*** (0.01)	-0.124*** (0.02)
Student	-0.088 (0.07)	-0.043 (0.07)	-0.065 (0.06)	0.014 (0.03)	0.004 (0.05)
Self-employed	-0.002 (0.05)	0.177*** (0.05)	0.115** (0.04)	0.060** (0.02)	0.025 (0.03)
Employed	-0.025 (0.04)	0.031 (0.04)	0.017 (0.03)	0.011 (0.02)	0.033 (0.03)
Retired	0.01 (0.05)	0.077 (0.06)	0.072 (0.05)	0.001 (0.03)	0.057 (0.03)
Manual worker	-0.024 (0.06)	0.043 (0.06)	0.042 (0.05)	0.001 (0.03)	-0.035 (0.04)
Small town	0.000 (0.03)	-0.032 (0.03)	-0.037 (0.03)	0.006 (0.01)	0.007 (0.02)
Large town	0.055 (0.03)	0.047 (0.03)	0.047 (0.03)	-0.001 (0.01)	0.044* (0.02)
Numeric skills (total)	-0.009 (0.02)	-0.024 (0.02)	-0.017 (0.02)	-0.008 (0.01)	-0.003 (0.01)
Spoken languages (total)	0.045* (0.02)	0.103*** (0.02)	0.056** (0.02)	0.041*** (0.01)	0.015 (0.01)
Financial difficulty	-0.080** (0.03)	0.233*** (0.03)	0.189*** (0.03)	0.042*** (0.01)	-0.034* (0.02)
English	0.031 (0.04)	0.132*** (0.04)	0.124*** (0.03)	0.024 (0.02)	0.081*** (0.02)
German	-0.012 (0.04)	-0.016 (0.04)	0.011 (0.04)	-0.021 (0.02)	-0.006 (0.03)
French	0.011 (0.05)	0.113* (0.05)	0.104* (0.04)	0.009 (0.02)	-0.001 (0.03)
Mobile phone	0.126 (0.10)	0.193* (0.09)	0.186* (0.08)	0.009 (0.04)	-0.055 (0.05)
Online purchase	0.065* (0.03)	0.266*** (0.03)	0.183*** (0.02)	0.087*** (0.01)	0.103*** (0.02)
Trust in PA	0.036 (0.03)	-0.239*** (0.03)	-0.223*** (0.02)	-0.016 (0.01)	0.019 (0.02)
Trust in NGOs	0.019 (0.03)	-0.129*** (0.03)	-0.097*** (0.02)	-0.034** (0.01)	0.009 (0.02)
Ease of settling disputes through out-of-court	-0.047 (0.03)	-0.115*** (0.03)	-0.100*** (0.02)	-0.013 (0.01)	0.004 (0.02)
Ease of settling disputes through Court	0.042 (0.03)	-0.093*** (0.03)	-0.068** (0.02)	-0.025* (0.01)	0.013 (0.02)
Knowledge of consumers' rights (total)	0.019 (0.01)	0.027 (0.01)	0.022 (0.01)	0.005 (0.01)	
Country dummies	yes	yes	yes	yes	yes
pseudo R-squared	0.022	0.044	0.058	0.081	0.025
AIC	6797	43220	38931	16011	34891
BIC	7111	43610	39321	16401	35273
N	3085	13275	13275	13275	13276

⁴⁰ Table 29 reports the average marginal effects, so for example 1 additional year of age associates with an extra 0.02 complaints, a raise of 0.03 in the number of victimization episodes, and a boost of 0.03 in the knowledge of consumers' rights.

About the dummy of online purchase, purchasing online correlates with a 0.07 more complaint, with a 0.3 additional victimisation episodes, and with a supplementary knowledge of consumers' rights of 0.1 item. In other words an individual who purchases online is predicted to have - other things equal - 0.07 more complaint, 0.3 more victimisation episodes, and 0.1 more in the knowledge of consumers' rights.

Table 30 documents the characteristics of trust-related dependent variables. The relevant covariates stay the same, while the dependents are respectively:

1. Trust in Public Authorities is built on question Q3 of the survey, it is a dummy variable equal to 1 when consumers agree to the first category of Q3 (i.e. both the categories of “strongly agree”, and “agree” to the category “*How strongly do you agree or disagree with each of the following statements. In (OUR COUNTRY): ...You trust public authorities to protect your rights as a consumer*” of Q3 are taken into account), and 0 otherwise;
2. Trust in Retailers and Service Providers is a dummy variable equal to 1 when consumers agree to the second category of question Q3 (i.e. both the categories of “strongly agree”, and “agree” to the category “*How strongly do you agree or disagree with each of the following statements. In (OUR COUNTRY): ... in general, retailers/ service providers respect your rights as a consumer*” of Q3 are taken into account), and 0 otherwise;
3. Trust in Non-Governmental Consumer Organisations is a dummy variable equal to 1 when consumers agree to the third category of question Q3 (i.e. both the categories of “strongly agree”, and “agree” to the category “*How strongly do you agree or disagree with each of the following statements. In (OUR COUNTRY): ... you trust that non-governmental consumer organisations protect your rights as a consumer*” of Q3 are taken into account), and 0 otherwise.

In this case we perform logit models for dichotomous dependent variables, and the results contained in the table are the marginal effects.

In the case of trust as dependent variable less evidence is highlighted by the estimates. Consumers’ age appear to be significantly negative in two cases out of three, and to have the same U-shaped effect already observed before in one case out of three.

Being a student is positively related to every type of trust, maybe due to the confident view that students have about reality. Being self-employed is once negative, once positive, and once not significant, while being employed is slightly significant and positive only for trust in retailers and service providers. Living in a large town associates negatively with trust in retailers and service providers. Numerical skills instead relates positively with trust in public authorities.

The variable accounting for financial difficulty has the same (negative and significant) stable impact on the three variables of trust. The knowledge of German has a curious negative

association with trust in retailers and service providers.⁴¹ Finally, online purchase, ease of settling disputes out-of-Court and through Court have the same (positive and significant) stable impact on the three variables of trust.

⁴¹ This result may be driven by a regional effect that is not accounted for in the models, however we control for country level effects by including country dummies.

Table 30 Multivariate analyses on consumer trust⁴²

	Trust		
	Public authorities	Retailers and service providers	Non-governmental consumer organisations
Age	-0.005** (0.00)	-0.007*** (0.00)	0.000 (0.00)
Age ²	0.000 (0.00)	0.000*** (0.00)	0.000 (0.00)
Female	0.015 (0.01)	0.003 (0.01)	0.007 (0.01)
Student	0.057** (0.02)	0.055** (0.02)	0.051* (0.02)
Self-employed	-0.031* (0.02)	0.034* (0.02)	-0.012 (0.02)
Employed	0.015 (0.01)	0.033** (0.01)	0.009 (0.01)
Retired	-0.012 (0.02)	0.023 (0.02)	0.013 (0.02)
Manual worker	-0.007 (0.02)	0.015 (0.02)	0.018 (0.02)
Small town	-0.011 (0.01)	-0.014 (0.01)	0.011 (0.01)
Large town	-0.018 (0.01)	-0.025* (0.01)	0.004 (0.01)
Numeric skills (total)	0.013* (0.01)	0.011 (0.01)	0.011 (0.01)
Spoken languages (total)	0.003 (0.01)	-0.001 (0.01)	0.000 (0.01)
Financial difficulty	-0.068*** (0.01)	-0.047*** (0.01)	-0.057*** (0.01)
English	-0.021 (0.01)	-0.012 (0.01)	-0.004 (0.01)
German	-0.023 (0.01)	-0.037** (0.01)	0.002 (0.01)
French	-0.024 (0.02)	-0.012 (0.02)	-0.003 (0.02)
Mobile phone	0.031 (0.02)	-0.012 (0.02)	0.011 (0.02)
Online purchase	0.019* (0.01)	0.048*** (0.01)	0.043*** (0.01)
Trust in PA			
Trust in NGOs			
Ease of settling disputes through out-of-court	0.145*** (0.01)	0.146*** (0.01)	0.147*** (0.01)
Ease of settling disputes through Court	0.164*** (0.01)	0.107*** (0.01)	0.101*** (0.01)
Knowledge of consumers' rights (total)	0.005 (0.00)	-0.003 (0.00)	0.003 (0.01)
Country dummies	yes	yes	yes
pseudo R-squared	0.151	0.097	0.093
AIC	15671	14965	15862
BIC	16047	15342	16237
N	13734	13706	13393

⁴² Table 30 reports the marginal effects about logit estimates. So 1 year more in age associates with a decrease of 0.01 of the trust in PAs, while being a student raises the trust in PAs of 0.1.

Table 31 presents the marginal effects obtained from logit estimates on three variables of online purchases that we built out of question Q1⁴³ of the survey. In particular:

1. The first variable about online purchases is a dummy variable equal to 1 when consumers purchased any goods or services via the internet (i.e. yes- answer to the first, second, third, and fifth category of Q1), and 0 otherwise;
2. The second variable about online purchases only considers domestic online purchases. Therefore, it is a dummy variable equal to 1 when consumers purchased any goods or services via the internet from a retailer/ service provider located in their country (i.e. yes- answer to the first category of Q1), and 0 otherwise;
3. The third variable about online purchases only considers foreign/international online purchases. Therefore, it is a dummy variable equal to 1 when consumers purchased any goods or services via the internet from a retailer/ service provider outside their country (i.e. yes- answer to the second, and third category of Q1), and 0 otherwise.

This table looks quite insightful. The U-shaped effect of consumers' age is once again present. Female is negatively associated with online shopping abroad. Being self-employed, being employed, and being retired are positively associated with all the categories of online shopping. Living in a large town is positively correlated with online shopping abroad.

Numerical skills are positively linked to all the types of online shopping, while the number of spoken language only to the foreign-type of online shopping. Although, more relevant than the number of languages is the knowledge of English which has a positive effect everywhere. The variable of financial difficulty is negative in all cases. The use of mobile phone is positive.

The two variables of trust have different signs for different types of online shopping. Trust in Public Authorities is negatively associated to foreign online shopping, while trust in Non-Governmental Organisations is positive for all types of online shopping. Finally, the ease of

⁴³

Q1 In the past 12 months, have you purchased any goods or services via the internet in (OUR COUNTRY) or elsewhere in any of the following ways?

1. Yes, from a retailer/ service provider located in (OUR COUNTRY)
2. Yes, from a retailer/ service provider located in another EU country
3. Yes, from a retailer/provider located outside the EU
4. No, (SINGLE RESPONSE)
5. Yes, you purchased online but do not know where the retailer/ service provider is located (DO NOT READ OUT)
6. DK/NA

settling disputes thorough Courts has negative associations with domestic online shopping, while the knowledge of consumer rights has a general positive effect.

Table 31 Multivariate analyses on online purchases

	Online purchases		
	Total	Domestic	Abroad
Age	0.009*** (0.00)	0.013*** (0.00)	0.005** (0.00)
Age ²	-0.000*** (0.00)	-0.000*** (0.00)	-0.000*** (0.00)
Female	-0.022** (0.01)	-0.006 (0.01)	-0.062*** (0.01)
Student	-0.008 (0.02)	-0.021 (0.02)	-0.001 (0.02)
Self-employed	0.081*** (0.02)	0.062*** (0.02)	0.067*** (0.01)
Employed	0.098*** (0.01)	0.081*** (0.01)	0.061*** (0.01)
Retired	0.070*** (0.02)	0.054** (0.02)	0.056** (0.02)
Manual worker	-0.029 (0.02)	-0.018 (0.02)	-0.024 (0.02)
Small town	0.012 (0.01)	0.005 (0.01)	0.015 (0.01)
Large town	0.022* (0.01)	0.006 (0.01)	0.034*** (0.01)
Numeric skills (total)	0.057*** (0.01)	0.051*** (0.01)	0.040*** (0.01)
Spoken languages (total)	0.014* (0.01)	0.01 (0.01)	0.016** (0.01)
Financial difficulty	-0.096*** (0.01)	-0.088*** (0.01)	-0.065*** (0.01)
English	0.150*** (0.01)	0.126*** (0.01)	0.139*** (0.01)
German	0.024 (0.01)	0.016 (0.01)	0.036** (0.01)
French	0.028 (0.02)	0.021 (0.02)	0.044*** (0.01)
Mobile phone	0.166*** (0.03)	0.153*** (0.03)	0.090*** (0.03)
Online purchase			
Trust in PA	0.007 (0.01)	0.012 (0.01)	-0.023** (0.01)
Trust in NGOs	0.040*** (0.01)	0.037*** (0.01)	0.023** (0.01)
Ease of settling disputes through out-of-court	0.016 (0.01)	0.019* (0.01)	0.000 (0.01)
Ease of settling disputes through Court	-0.024** (0.01)	-0.026** (0.01)	-0.01 (0.01)
Knowledge of consumers' rights (total)	0.027*** (0.01)	0.030*** (0.01)	0.013*** (0.00)
Country dummies	yes	yes	yes
pseudo R-squared	0.164	0.148	0.182
AIC	15285	15715	12245
BIC	15667	16097	12627
N	13276	13276	13276

In the last table (Table 32) of consumers' estimates we consider five measures of consumers' confidence, and we present the marginal effects of five logit regressions performed on dummy variables built as follows:

1. The three dependent variables to which the first three regressions refers to are built on questions Q17⁴⁴, specifically distinguishing the total "agrees", the "agrees" for domestic online shopping, the "agrees" for online shopping in other EU countries;
2. The fourth dummy variable is equal to 1 when consumers have no confidence at all in shopping online both in their country and in other EU countries;
3. Finally, we include a variable of confidence in cross-border selling built on question Q2⁴⁵, this dummy is equal to 1 for yes-type of answer to Q2.

The U-shaped effect of age is only present in the first and last column, for the aggregate measure of online confidence and for confidence in cross-border selling. In the case of complete absence of confidence in online shopping what seems to matter is elderly ages. Female gender is positively associated with the confidence in domestic online selling and with the situation of no confidence in online selling, while it negatively correlated with confidence in online selling in other EU countries and with the confidence in cross border selling.

The covariates for student, self-employed, and employed are positive in the aggregate measure of confidence in online shopping and negative for the measure of no confidence. The variables for small town and large town (with respect to rural area that is the baseline) are positively associated with the aggregate confidence in online shopping and in cross-border selling, and negatively with the absence of confidence in online shopping. Roughly similar evidence is observed for the numerical skills and for the number of spoken languages.

⁴⁴ Q17 How strongly do you agree or disagree with each of the following statements? (Strongly agree / Agree / Disagree / Strongly disagree / DK or NA):

1. You feel confident purchasing goods or services via the Internet from retailers/ service providers in (OUR COUNTRY)
2. You feel confident purchasing goods or services via the Internet from retailers/ service providers in another EU country

⁴⁵ Q2 In the past 12 months, have you purchased any goods or services through channels other than the internet from a retailer/ service provider located in another EU country? (Yes / No / DK)

A situation of financial difficulty is negative for confidence measures and positive for non-confidence measure, which looks quite plausible. The knowledge of English positively links to confidence measures, and negatively to the absence of confidence, similarly to the use of a mobile phone. Eventually, trust measures, the ease of settling disputes, and the knowledge of consumers' rights are in a positive relation with the aggregate measure of confidence in online shopping, and obviously in a negative one with the lack of confidence.

Table 32 Multivariate analyses on consumer confidence

	Confidence measures				
	Buying online (Total)	Buying online (only in own country)	Buying online (only abroad)	No confidence in online shopping	Cross-boarder selling
Age	0.006*** (0.00)	0.002 (0.00)	0.000 (0.00)	-0.002 (0.00)	0.003* (0.00)
Age ²	-0.000*** (0.00)	0.000 (0.00)	0.000 (0.00)	0.000*** (0.00)	-0.000** (0.00)
Female	-0.080*** (0.01)	0.030*** (0.01)	-0.015*** (0.00)	0.062*** (0.01)	-0.023*** (0.01)
Student	0.056** (0.02)	0.022 (0.02)	-0.011 (0.01)	-0.060** (0.02)	0.003 (0.02)
Self-employed	0.059*** (0.02)	-0.004 (0.02)	-0.002 (0.01)	-0.061*** (0.02)	0.040** (0.01)
Employed	0.065*** (0.01)	0.021 (0.01)	-0.017** (0.01)	-0.082*** (0.01)	0.02 (0.01)
Retired	0.01 (0.02)	0.017 (0.02)	-0.008 (0.01)	-0.024 (0.01)	0.003 (0.02)
Manual worker	-0.014 (0.02)	0.034* (0.02)	-0.010 (0.01)	-0.003 (0.02)	-0.001 (0.02)
Small town	0.026** (0.01)	0.008 (0.01)	0.002 (0.00)	-0.035*** (0.01)	0.025*** (0.01)
Large town	0.040*** (0.01)	-0.020* (0.01)	0.003 (0.00)	-0.028** (0.01)	0.041*** (0.01)
Numeric skills (total)	0.024*** (0.01)	0.013* (0.01)	-0.003 (0.00)	-0.034*** (0.01)	0.006 (0.01)
Spoken languages (total)	0.006 (0.01)	-0.005 (0.01)	-0.003 (0.00)	0.001 (0.01)	0.023*** (0.00)
Financial difficulty	-0.065*** (0.01)	0.006 (0.01)	0.002 (0.00)	0.058*** (0.01)	-0.034*** (0.01)
English	0.115*** (0.01)	0.004 (0.01)	0.011* (0.01)	-0.108*** (0.01)	0.029** (0.01)
German	0.032* (0.01)	-0.031* (0.01)	0.016** (0.01)	-0.016 (0.01)	0.023* (0.01)
French	0.033* (0.02)	0.000 (0.02)	0.003 (0.01)	-0.039** (0.02)	0.011 (0.01)
Mobile phone	0.077*** (0.02)	0.021 (0.02)	-0.001 (0.01)	-0.052** (0.02)	0.048* (0.02)
Online purchase					0.052*** (0.00)
Trust in PA	0.053*** (0.01)	0.027** (0.01)	-0.014*** (0.00)	-0.061*** (0.01)	-0.003 (0.01)
Trust in NGOs	0.089*** (0.01)	0.011 (0.01)	-0.002 (0.00)	-0.089*** (0.01)	0.007 (0.01)
Ease of settling disputes through out-of-court	0.067*** (0.01)	0.006 (0.01)	-0.009* (0.00)	-0.062*** (0.01)	0.01 (0.01)
Ease of settling disputes through Court	0.033*** (0.01)	-0.001 (0.01)	0.001 (0.00)	-0.033*** (0.01)	-0.005 (0.01)
Knowledge of consumers' rights (total)	0.017*** (0.00)	-0.005 (0.00)	-0.002 (0.00)	-0.010* (0.00)	0.016*** (0.00)
Country dummies	yes	yes	yes	yes	yes
pseudo R-squared	0.153	0.039	0.083	0.166	0.089
AIC	16832	16133	4989	16135	10135
BIC	17221	16521	5377	16523	10525
N	14979	14979	14979	14979	13236

2.1.2.2 EC retailer survey

While there exists abundant literature exploring which consumer characteristics are related to consumer conditions from the consumers' die, to the best of our knowledge the literature from the business perspective is inexistent. Hence, the empirical models proposed in this chapter do not rest upon findings of prior research, but on our understanding of the issue and empirical ideas that we deem insightful (Table 33). We estimate logistic and Poisson models to determine the impact of firm characteristics on different conditions related to the retailers' received complaints, knowledge of the legislation, and attitude towards online selling.

While the aforementioned conditions are used as dependent variables, they can also appear as explanatory variables in other models. As such, we include the firms' knowledge and awareness of consumer legislation and regulation as explanatory variable in several models. We assume that firms with a better knowledge of what is allowed in terms of legislation are more likely to stick to fair commercial practices and will hence receive consumer complaints through fewer channels.⁴⁶ To take firms' knowledge into account we make use of question Q5 and Q6 in which firms are surveyed about their knowledge and awareness of the legislation. Another key discriminant that can be used as explanatory variable is the online selling. Firms selling online to their final consumers may be more exposed to consumer complaints due to the fact that consumers cannot check the physical characteristics of the products or services they are buying or due to the fact that the firms' website does not present the sales conditions in a clear and understandable way. Because of this deficiency in the initial interactions with sellers (present instead in direct buying from shops), consumers who buy online are more prone to receiving something that is not fit-for-purpose and complain in case of problems. To this purpose we include a dummy for online sales based on question D5.

In addition, we also include firms' perception on the easiness and cost of compliance with consumer legislation in the sector based on question Q8. Firms that perceive compliance as a

⁴⁶ The EC retailer survey does not contain any question to evaluate the amount of consumer complaints received by the retailer, as the measurement error of this question would be high. As alternative we use the number of channels through which a retailer receives a complaint. As such, with 'high complaints' in the text we refer to higher amount of complaint channels used. We want to stress that the question we use is not a good proxy for the prevalence of retailer complaints received.

strong (financial) difficulty may be more incline to fraud on legislation which in turn can lead to a higher amount of consumer complaints. We also include a proxy for the perception of compliance with legislation in own country based on question 10.

Finally, we control for a wide range of other firm characteristics including firm size (measured by employment), turnover, the degree of internationalisation (measured by the number of EU countries in which firms currently make cross-border sales), type of business (i.e. active in selling food products, non-food products or services), the sales channels used for retail and the firm's position in the value chain (i.e. distance selling or not). Eventually we include country and sector dummies to account for the heterogeneity due to country and sector differences.

Table 33 provides the definitions of the variables that are used in the multivariate analyses for the EC retailer surveys, while summary statistics are described in Table 34.

Table 33 Definitions of variables used for multivariate analyses of the retailer survey

Variable	Based on question	Definition	Sample	Why we include it in the model
Experience with received complaints	Q14 and Q15	Count variable indicating the number of channels through which retailers received complaints	From all consumers From domestic consumers From consumers in other EU countries	Variety of channels through which consumers complain
Knowledge of legislation	Q5 & Q6	Number of correct answers on statements regarding legislation related to commercial practices		Measure of knowledge of regulation and legislation
Online selling	D5a & D5b	Dummy accounting for whether a company sells online or not		Measure for online selling activity
Use of ADR	Q13a & Q13b & Q13c	Retailers' knowledge of ADRs (dummy 1: yes - 0: no)		Retailers' knowledge of alternative dispute resolution
Size	B2	Categorical variable indicating 3 ranges of number of employees (less than 10 employees is the baseline)		
Turnover	D1	Turnover of the previous year (firms with turnover of less or equal than 1mio euro are baseline)		
Degree of internationalisation	D2	How many countries do retailers sell in case of cross-borders sales		Measure for the degree of internationalisation
Distance selling	D4	Dummy indicating whether firm is active in distance selling or not		
Type of business	D6	Dummies accounting for the type of selling (i.e. food products; non-food products; services). Non-food products are baseline.		Measure for the type of business of retailers
Regulation monitor	Q8	Variable measuring the degree of agreement with the first four statements of Q8		Proxy for perceptions about consumer protection and monitoring of compliance with legislation
Ease and cost of compliance with consumer legislation	Q10	Count variable measuring the level of agreement on the 3 statements in own country		Proxy for the perception of compliance with legislation in own country
Country dummies	D01	Dummies per country (UK is baseline)		Measure to account for heterogeneity due to country differences
Sector dummies	Vnace	Sector dummies: Car sales & repair", "Retail sales", "Transport & postal service", "Restaurants & catering", "Telecommunication", "Finance & insurances", "Real estate", "Renting & leasing", "Travel agencies", "Repair services" (fourth sector in list is baseline)		Measure to account for heterogeneity due to sector differences

Note: Knowledge of legislation and online selling are also used as explanatory variables in several regressions.

Table 34 Summary statistics for the variables used in the multivariate analyses of the EC retailer survey

Variables	Type	Reference survey question	Obs	Mean	Std.Dev.	Min	Max
Complaint (received): domestic	Dependent / Count	Q14	10,827	0.55	0.81	0	6
Complaint (received): EU	Dependent / Count	Q15	10,868	0.06	0.29	0	5
Complaint (received): all	Dependent / Count	Q14 / Q15	10,961	0.61	0.92	0	9
Knowledge of legislation	Dependent / Count	Q6	10,895	2.61	1.17	0	5
Online selling	Dependent / Dummy	D5	10,728	0.37	0.48	0	1
Use of ADR	Dependent / Dummy	Q13	10,535	0.59	0.49	0	1
Medium size	Independent / Dummy	B2	10,996	0.21	0.40	0	1
Large size	Independent / Dummy	B2	10,996	0.07	0.26	0	1
Small turnover	Independent / Dummy	D1	7,011	0.16	0.37	0	1
Medium turnover	Independent / Dummy	D1	7,011	0.30	0.46	0	1
Large turnover	Independent / Dummy	D1	7,011	0.22	0.41	0	1
International	Independent / Count	D2	10,845	1.67	4.81	0	28
Distance selling	Independent / Dummy	D4	10,619	0.54	0.50	0	1
Food products	Independent / Dummy	D6	10,969	0.34	0.47	0	1
Services	Independent / Dummy	D6	10,969	0.61	0.49	0	1
Knowledge of legislation	Independent / Count	Q6	10,895	2.61	1.17	0	5
Regulation monitor	Independent / Count	Q8	10,886	13.79	3.17	2	20
Compliance (own country)	Independent / Count	Q10	10,822	10.77	2.33	2	15

In Table 35 we present a set of Poisson and Logit estimates (using count dependent variables and dummy dependent variables respectively) about retailers in order to observe the most relevant associations between six key dependent variables and a group of covariates.

The dependent variables that we take into account are built as follows:

1. The first three variables about complaints count the number of channels through which retailers received complaints, as specified in questions Q14 and Q15 of the survey. In Q14 retailers are asked to specify through which of the following way they received complaints from their own country: • through in-house customer services; • through non-governmental consumer organizations; • through public authorities; • through alternative dispute resolution bodies (such as ombudsman, consumer complaints board, arbitrators, mediators, or other out-of-court bodies); • through courts; • through other channels. In Q15 they are asked to specify through which of the following way they received complaints from other EU countries: • through in-house customer services; • through European Consumer Centres; • through non-governmental consumer organizations; • through public authorities; • through alternative dispute resolution bodies (such as ombudsman, consumer complaints board, arbitrators, mediators, or other out-of-court bodies); • through the European Small Claims Procedure; • through courts (other than the through the European Small Claims Procedure); • through other channels.

The first variable of the table is built on Q14, the second on Q15, and the third takes into account both counting the numbers of domestic and European episodes.

2. Knowledge of legislation is a count variable built to sum the correct answers retailers gave to questions Q5 and Q6⁴⁷.
3. The variable for online selling is a dummy equal to 1 when retailers give a yes-answer to one of the categories for online selling contained in question D5a and D5b (i.e. selling

⁴⁷ Q5 Imagine that a consumer bought a durable good 18 months ago and it breaks down without any fault on his part. He didn't buy or benefit from any extended commercial guarantee. Does he have the right to have it repaired or replaced for free? (Yes / No / It depends on the product / DK)

Q6 I will read 4 statements concerning legislation in (OUR COUNTRY) related to commercial practices. Some of them are prohibited and some are not. For each statement, please tell me if you think it is prohibited or not? (Prohibited / Not prohibited / DK)

1. To include an invoice or a similar document seeking payment in marketing material;
2. To run a promotional campaign stating "We offer a discount of 60%" although the products offered with a 60% discount are almost depleted;
3. To promote products for children including a direct call to parents to buy the advertised products by targeting directly the parents in the advertisements;
4. To describe a product as "free" although it is only available free of charge to customers calling a premium rate phone number.

online to final consumers in their country, selling online to final consumers in other EU countries, selling online to final consumers in other non-EU countries).

4. Finally, the use of ADR mechanisms is a dummy equal to 1 for each yes-answer in questions Q13a, b, and c where retailers have to say: if they are willing or obliged to use them, if they are not willing to use them, and if ADR bodies do not cover disputes concerning their business.

Medium and large sized firms are in positive relationship (with respect to the baseline of small size, i.e. 10-49 employees) with all the dependents but the use of ADR schemes (and the knowledge of legislation for large size). The turnover (whose baseline is very small turnover, i.e. smaller than or equal to 1mio euro) is positively associated with complaints, and slightly also with online selling.

The variable capturing the international dimension of a firm is obviously negatively linked to domestic complaint, while positively associated with complaints received from other EU countries and with online selling. Distance selling is positively correlated with the complaints received (both domestic and from other EU countries), and with the use of ADR.

Selling food products is negatively linked to all the dependent variables in all the models, while selling services shows the opposite sign in all the regressions.

The knowledge of legislation is positive in the Poisson model for domestic complaint and in the logit model for the use of ADR. The variable on regulation counts how often the retailers agree with the following statements of Q8 about their country: public authorities actively monitor and ensure compliance with consumer legislation in your sector; consumer NGOs actively monitor compliance with consumer legislation in your sector; self-regulatory bodies actively monitor respect of codes of conduct or codes of practice in your sector; media regularly report on businesses which do not respect consumer legislation in your sector; public authorities actively monitor and ensure compliance with product safety legislation in your sector. This is positively associated with domestic complaints, online selling, knowledge of legislation, and use of ADR. This variable could be actually a proxy for the quality of institutions that the retailers are asked to report about.

Finally, the variable about compliance instead is built as a count for the total agrees in question Q10 where retailers have to agree with the following statements: competitors comply with consumer legislation; it is easy to comply with consumer legislation in your sector; the costs related to compliance with consumer legislation in the sector are reasonable. This is negative related to domestic complaints, but positively with the knowledge of legislation.

Table 35 Multivariate analyses on complaints, knowledge and online selling

	Complaint (received)			Knowledge of legislation	Online selling	Use of ADR
	Domestic	EU	All			
Medium size	0.252*** (0.02)	0.044*** (0.01)	0.292*** (0.03)	0.084* (0.04)	0.074*** (0.02)	0.014 (0.02)
Large size	0.403*** (0.04)	0.062*** (0.02)	0.458*** (0.04)	0.001 (0.06)	0.064* (0.03)	0.035 (0.03)
Small turnover	0.087* (0.04)	0.006 (0.02)	0.097* (0.04)	-0.024 (0.05)	-0.012 (0.02)	-0.012 (0.02)
Medium turnover	0.164*** (0.03)	0.016 (0.01)	0.187*** (0.03)	-0.023 (0.04)	0.023 (0.02)	0.013 (0.02)
Large turnover	0.256*** (0.03)	0.046** (0.02)	0.302*** (0.04)	0.004 (0.05)	0.042* (0.02)	0.037 (0.02)
International	-0.009*** (0.00)	0.005*** (0.00)	0.004* (0.00)	0.000 (0.00)	0.015*** (0.00)	-0.002 (0.00)
Distance selling	0.126*** (0.02)	0.071*** (0.01)	0.167*** (0.02)	-0.037 (0.03)		0.044*** (0.01)
Food products	-0.020 (0.03)	-0.030** (0.01)	-0.043 (0.03)	-0.095* (0.04)	-0.235*** (0.02)	-0.038* (0.02)
Services	0.122*** (0.02)	0.011 (0.01)	0.137*** (0.02)	0.032 (0.03)	0.041** (0.01)	0.061*** (0.01)
Knowledge of legislation	0.029*** (0.01)	-0.002 (0.00)	0.027** (0.01)		-0.009 (0.01)	0.013* (0.01)
Regulation monitor	0.017*** (0.00)	0.001 (0.00)	0.018*** (0.00)	0.028*** (0.01)	0.012*** (0.00)	0.008*** (0.00)
Compliance (own country)	-0.014** (0.00)	0.001 (0.00)	-0.013** (0.01)	0.015* (0.01)	0.001 (0.00)	0.001 (0.00)
<i>country dummies</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
<i>sector dummies</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>	<i>yes</i>
pseudo R-squared	0.113	0.243	0.118	0.012	0.109	0.051
AIC	12108	2690	13084	21695	7855	8058
BIC	12447	3029	13423	22027	8188	8396
N	6491	6489	6521	6531	6603	6325

2.1.2.3 Summary statistics on the impact of socio-demographic factors on consumer conditions

In collaboration with the unit E1 of DG Justice and Consumers we performed additional multivariate analyses with alternative specifications. The results of the models presented in this paragraph are all based on weighted data in order to obtain more reliable results reflecting population data. In addition, the dependent variables are calculated in line with the proposed indicators for the 10th edition of the consumer conditions index (see chapter 2.5). While the dependent variables and the indicators of the index are based on the same data and questions of the survey questionnaires, the former variables are defined at consumer level, while the latter ones are defined at country level. The marginal effects of the various models are presented in

Table 36. This table will partially feed into the Consumer Conditions Scoreboard report of 2015 (European Commission, 2015). We refer to that report for more information about the interpretation of the results.

Table 36: Marginal effects from the multivariate analysis

		Knowledge of consumers' rights																						Trust in organisations		Perception of redress mechanisms		Trust in product safety		Trust in environmental claims		Confidence in online shopping		No Exposure to UCPs		No experience of other illicit commercial practices		No Experience of any problems with goods or services		Satisfaction with complaint handling		Numerical skills	
Financial difficulty	Yes																																										
	No	0.016*	A	0.075***	A	0.011	A	0.069***	A	0.050***	A	0.059***	A	0.057***	A	0.044***	A	0.025*	A	0.001	A	0.018***	A																				
Internet use	Daily	0.025**	A	0.058***	A	-0.003	A	0.055***	A	0.036*	A	0.310***	A	-0.085***	A	-0.040***	A	-0.086***	A	0.059***	A	0.034***	A																				
	Weekly	0.005	AB	0.031*	B	0.015	A	0.045*	A	0.041*	A	0.208***	B	-0.038***	B	-0.026*	A	-0.038*	B	0.023*	B	0.017**	B																				
	Monthly	0.008	AB	0.023	AB	0.016	A	0.042	A	0.070*	A	0.159***	B	-0.066***	AB	-0.045*	A	-0.027	B	0.017	AB	0.014	B																				
	Never																																										
Gender	Female	-0.044***	A	0.005	A	-0.025**	A	-0.048***	A	-0.024*	A	-0.062***	A	0.03***	A	0.034***	A	0.025**	A	-0.006	A	-0.007*	A																				
	Male																																										
Age	15-24																																										
	25-34	0.073***	A	-0.017	A	-0.043	A	0.009	AB	-0.064*	A	0.019	A	-0.018	A	0.007	A	-0.029	A	0.023	A	0.003	A																				
	35-44	0.103***	B	-0.021	A	-0.070**	AB	0.002	AB	-0.079*	A	-0.018	B	-0.031*	AB	0.013	A	-0.006	AB	0.007	AB	0.004	A																				
	45-54	0.127***	C	-0.039*	AB	-0.078**	B	0.022	A	-0.119***	B	-0.084***	C	-0.041**	B	0.029	A	0.010	B	0.006	AB	-0.001	AB																				
	55-64	0.142***	C	-0.067***	C	-0.108***	C	-0.019	B	-0.135***	B	-0.146***	D	-0.032*	AB	0.058**	B	0.008	B	0.000	AB	-0.008	B																				
	more than 65	0.135***	C	-0.056*	BC	-0.130***	C	-0.037	B	-0.145***	B	-0.258***	E	-0.028	AB	0.074***	B	0.055	C	-0.015	B	-0.033***	C																				
Languages	Only native																																										
	Two	0.035***	A	-0.027***	A	-0.015	A	-0.011	A	-0.039**	A	0.014	A	-0.029***	A	-0.010	A	-0.029*	A	0.022*	A	0.007*	A																				
	Three	0.030**	A	-0.034**	AB	-0.043***	B	0.014	A	-0.034*	A	0.014	A	-0.037***	AB	-0.024*	A	-0.027	A	0.022*	A	0.016***	B																				
Living Area	Four or more	0.048***	A	-0.059***	B	-0.061***	B	-0.003	A	-0.054*	A	0.052***	B	-0.055***	B	-0.067***	B	-0.081***	B	0.057**	A	0.009	AB																				
	Rural area																																										
	Small town	0.010	A	-0.008	A	0.020	A	0.002	A	-0.001	A	0.001	A	0.018*	A	0.004	A	-0.029**	A	0.021*	A	-0.003	A																				
Education	Large town	0.001	A	0.000	A	-0.004	B	0.013	A	-0.008	A	0.016	A	-0.006	B	-0.026**	B	-0.046***	A	0.030***	A	-0.007	A																				
	Until 15																																										
	16-19	-0.025*	A	0.025	A	0.027	A	-0.021	A	0.042*	A	0.058**	A	0.016	A	0.006	A	0.025	A	0.003	A	0.018***	A																				
Numerical skills	more than 20	-0.009	B	0.018	A	-0.002	B	0.014	B	0.009	B	0.080***	B	-0.02	B	-0.001	A	0.009	A	0.003	A	0.027***	B																				
	Still studying	-0.016	AB	0.002	A	0.026	AB	0.005	AB	0.037	AB	0.070*	AB	-0.006	AB	-0.007	A	0.008	A	0.023	A	0.015	AB																				
	High	0.006	A	0.010	A	-0.008	A	0.034*	A	-0.003	A	0.055***	A	-0.016	A	-0.003	A	-0.019	A	0.016	A																						
Employment status	Medium	-0.005	A	0.004	A	0.017	B	0.021	A	0.012	A	0.035*	B	0.001	B	-0.012	A	-0.029	A	0.027*	A																						
	Low																																										
	Self-employed	0.028	A	-0.034	A	-0.058*	A	0.030	A	-0.029	A	0.049*	AB	-0.024	A	-0.005	A	-0.021	A	0.017	A	0.023**	A																				
Employment status	White collar	0.011	A	0.002	B	-0.034	AB	0.027	A	0.013	B	0.060**	B	0.009	B	0.027	BC	-0.011	A	0.029*	A	0.022***	A																				
	Manual worker	0.013	A	-0.001	ABC	-0.013	BC	0.002	A	0.021	AB	0.016	AC	-0.004	AB	0.036*	B	0.021	A	-0.013	B	0.000	BC																				
	Unemployed																																										
	Housewife	0.014	A	0.009	BC	0.006	C	0.033	A	0.022	AB	-0.004	C	0.004	B	0.024	ABC	0.003	A	0.014	AB	-0.007	B																				
	Student	0.015	A	0.043	B	-0.054	ABC	0.061	A	-0.074	AB	0.055	ABC	0.015	AB	0.044	BC	0.040	A	-0.003	AB	0.016	ABC																				
	Retired	0.008	A	-0.027	AC	-0.037	AB	0.021	A	-0.011	AB	0.020	AC	0.011	B	0.024	ABC	0.005	A	0.016	AB	0.008	C																				

Note: Values in the table represent marginal effects of the socio-demographic models. Stars (i.e. *, **, ***) indicate 10%, 5% and 1% significance levels. Letters allow to compare margins within the same socio-demographic characteristic. Values sharing a letter are not significantly different at the 5% level.

2.2 Survey indicators of consumers' complaints, knowledge and trust

Violeta Piculescu and Vincent Van Roy

In this chapter we explore the possibility to derive measures of consumer conditions for consumer complaints, consumer knowledge, trust and prevalence of UCP at country level based on the consumers' answers elicited through the EC survey on consumers.

2.2.1 Complaining behaviour of consumers

The previous editions of the consumer conditions scoreboard contained several indicators on consumer complaints, including: 1) the percentage of complaining consumers measured on the sub-sample of respondents that experience one or more problems, and 2) the percentage of individuals who were satisfied with the complaint handling by the retailer/provider among those that inserted a complaint.

These indicators have several drawbacks. First, the sample on which they are based remains relatively small (e.g. in the latest EC consumer survey conducted in 2014 only 5517 respondents reported to have experienced a problem, while 4048 of them complained about it). Due to the limited samples, the appropriateness of inserting them in the consumer conditions index may be questioned since they may introduce a negative bias on the overall index. Second, these indicators do not take into account the volume of detriment, while it is not correct to assume that a higher complaining behaviour leads to better consumer conditions.

To overcome these drawbacks the Consumer Markets unit in the Consumers Directorate of the DG Justice and Consumers proposes an alternative indicator on problems and complaints that incorporates the information included in the four following questions:

Q9 In the past 12 months, have you experienced any problem when buying or using any goods or services in (OUR COUNTRY) where you thought you had a legitimate cause for complaint?

- 1) Yes, and you took action to solve the problem(s)*
- 2) Yes, but you did not do anything*
- 3) No*
- 4) Don't know*

The variable in the survey dataset that includes the individuals' responses to the question is q9. The variable is coded with values 1, 2, 3, or 4.

Q10 Follow up to question 9: If answered "Yes and you took action to solve the problem", what did you do?

- 1) You complained about it to the retailer or service provider*
- 2) You complained about it to the manufacturer*
- 3) You complained about it to a public authority*
- 4) You brought the matter to an out-of-court dispute resolution body (ADR) such as an ombudsman, arbitration, mediation or conciliation body*
- 5) You took the business concerned to court*
- 6) Other*
- 7) Don't know*

The survey variables which include the individuals' answers to this question are the following: q10_1, q10_2, q10_3, q10_4, q10_5, q10_6 and q10_7. All these variables are coded with values 1 or 0 for individuals who took an action related to the shopping problem (q9=1), and with missing values otherwise.

Q11 In general, how satisfied or dissatisfied were you with the way your complaint(s) was (were) dealt with by the...:

- 1) Retailer/provider*
- 2) Manufacturer*
- 3) Public authority*
- 4) An out-of-court dispute resolution body*
- 5) Court*

Scale: 1 = Very satisfied, 2 = Fairly satisfied, 3 = Not very satisfied, 4 = Not at all satisfied, 5 = DK/NA

The survey variables which include the individuals' answers to this question are the following: q11_1, q11_2, q11_3, q11_4, and q11_5. All these variables are coded with values 1 or 0 for individuals who took an action related to the shopping problem (q9=1), and with missing values otherwise.

Q12 What were the main reasons why you did not take action?

- 1) You were unlikely to get a satisfactory solution to the problem you encountered*
- 2) The sums involved were too small*
- 3) You did not know how or where to complain*
- 4) You were not sure of your rights as a consumer*
- 5) You thought it would take too long*
- 6) You tried to complain about other problems in the past but were not successful*
- 7) You thought complaining would have led to a confrontation, and you do not feel at ease in such situations*
- 8) Other*
- 9) DK/NA*

The survey variables which include the answers to question q12 are the following: q12_1, q12_2, q12_3, q12_4, q12_5, q12_6, q12_7, q12_8, and q12_9. These variables are coded with 1/ 0 for individuals who did not take any action (q9=2), and with missing values otherwise.

We provide some descriptive statistics on some of these questions in Box 16.

Box 16 Descriptive statistics on several survey questions about problems and complaints

In Table 37 we include the distributions of individuals' answers to questions q9 and q12 on complaining actions and reasons for not complaining when experiencing a shopping problem.⁴⁸ Column (4) in the table includes the numbers (and percentages) of individuals who stated they had had no legitimate reasons to complain during the last 12 months. At the EU28 level, more than 80% of the consumers' state they had no legitimate reasons to complain. The distribution of these answers, however, varies significantly across countries. The minimum percentage of individuals with no reasons to complain is recorded in Hungary (67.96%), and the maximum in Cyprus (88.87%).

Column (5) in Table 37 includes the percentages of individuals who stated they had legitimate reasons to complain in relation to a shopping problem and they took an action as a result. The country with most in this category is Croatia, with a percentage of 22.46%, and the country with the lowest percentage of consumers who complained is France, with a percentage of 6.76%.

Further, based on the answers to question 12 on reasons for not complaining, in columns (6) and (7) in Table 37 we group individuals in the sample as follows. The first group (column 6) includes individuals who did not take an action due to perceived difficulties with complaining, such as low probability to find a satisfactory solution (option 1 in question 12), lack of information on where to complain (option 3), lack of knowledge of consumer rights (option 4), perceptions of the length of the complaining procedure (option 5), unsuccessful past experience (option 6), and unease in confronting the counterpart (option 7). Countries with relatively larger percentages of consumers who did not take an action due to perceived difficulties include Greece (11.48%), Bulgaria (9.96%), Romania (8.84%) and Croatia (8.08%). Countries with low percentages of consumers who did not take action for these reasons include Sweden (1.42%), the Netherlands (1.20%), and Germany (1.42%). The answers of individuals who stated they did not take action due to a small detriment or other, unspecified, reasons are summarised in column (7). Percentages in this group are rather low for most countries, with the highest value of 2.57% recorded in Slovakia. Overall, based on the two columns combined, higher percentages of individuals who did not take any action even if they thought they had legitimate reasons to complain are recorded in Bulgaria (11.48%), Greece (12.39%), Romania (11.02%), and Croatia (9.58%).

⁴⁸ The table statistics are calculated on the respondents that filled in the question on experience with problems. Therefore, individuals who answered "don't know" or left it blank are not included.

Table 37 Distributions of experiences with shopping problems and complaining (EU28)
(percentages in the total number of sample observations at country level)

Country	Sample size		No legitimate reason to complain	Legitimate reason & complaint	Legitimate reason to complain & no complaint	
					Difficulties	Small detriment or other reasons
(1)	(2)	(3)	(4)	(5)	(6)	(7)
AT	993	Number obs Percent	841 84.69%	131 13.19%	16 1.61%	5 0.50%
BE	1000	Number obs Percent	866 86.60%	98 9.80%	27 2.70%	9 0.90%
BG	984	Number obs Percent	776 78.86%	95 9.65%	98 9.96%	15 1.52%
CY	494	Number obs Percent	439 88.87%	37 7.49%	10 2.02%	8 1.62%
CZ	995	Number obs Percent	823 82.71%	137 13.77%	26 2.61%	9 0.90%
DE	985	Number obs Percent	813 82.54%	150 15.23%	14 1.42%	8 0.81%
DK	988	Number obs Percent	851 86.13%	118 11.94%	9 0.91%	10 1.01%
EE	987	Number obs Percent	814 82.47%	121 12.26%	37 3.75%	15 1.52%
ES	988	Number obs Percent	760 76.92%	170 17.21%	50 5.06%	8 0.81%
FI	992	Number obs Percent	747 75.30%	201 20.26%	23 2.32%	21 2.12%
FR	991	Number obs Percent	865 87.29%	67 6.76%	50 5.05%	9 0.91%
GR	993	Number obs Percent	799 80.46%	69 6.95%	114 11.48%	11 1.11%
HR	1002	Number obs Percent	681 67.96%	225 22.46%	81 8.08%	15 1.50%
HU	1003	Number obs Percent	738 73.58%	214 21.34%	35 3.49%	16 1.60%
IE	990	Number obs Percent	759 76.67%	174 17.58%	45 4.55%	12 1.21%
IT	990	Number obs Percent	696 70.30%	204 20.61%	70 7.07%	20 2.02%
LT	981	Number obs Percent	808 82.36%	106 10.81%	51 5.20%	16 1.63%
LU	498	Number obs Percent	441 88.55%	41 8.23%	12 2.41%	4 0.80%
LV	998	Number obs Percent	784 78.56%	139 13.93%	65 6.51%	10 1.00%
MT	499	Number obs Percent	427 85.57%	59 11.82%	11 2.20%	2 0.40%
NL	998	Number obs Percent	795 79.66%	184 18.44%	12 1.20%	7 0.70%
PL	997	Number obs Percent	725 72.72%	218 21.87%	40 4.01%	14 1.40%
PT	977	Number obs Percent	822 84.14%	136 13.92%	16 1.64%	3 0.31%
RO	1007	Number obs Percent	779 77.36%	117 11.62%	89 8.84%	22 2.18%
SE	987	Number obs Percent	814 82.47%	150 15.20%	14 1.42%	9 0.91%
SI	1000	Number obs Percent	882 88.20%	90 9.00%	20 2.00%	8 0.80%
SK	1011	Number obs Percent	775 76.66%	189 18.69%	21 2.08%	26 2.57%
UK	1002	Number obs Percent	760 75.85%	202 20.16%	32 3.19%	8 0.80%
EU 28	26330	Number obs Percent	21080 80.06%	3842 14.59%	1088 4.13%	320 1.22%

In order to account for all the information included in these four questions, all the survey respondents' are allocated to one scenario of problems and complaints. The set of scenarios is

mutually exclusive and exhaustive, meaning that the whole sample of respondents is covered by the set of scenarios and that a respondent is allocated to one and only one scenario.

To determine which scenario is favoured over the other, scenario points are assigned to each of them (ranging from zero to ten). Obviously, the ideal situation is the one where a person did not experience any problem (this scenario gets a maximum score of 10). Other scenarios are then compared with each other and get a score based on following principles:

- 1) when one or more problems are experienced, the best thing to do is to complain about it, unless the decision not to complain is entirely justified by the small detriment associated with the problem(s).
- 2) complaining to the retailer/provider or to the manufacturer indicates a less serious problem and/or is less burdensome for consumer than complaining to third parties (public authority, ADR or court).
- 3) the final outcome of the complaint process also matters (satisfactory outcomes get a higher score).

Table 38 provides an overview of the 11 scenarios and their respective points allocated in line with the above mentioned principles.

Table 38 Scenarios on problems and complaints – description and scores

Scenario	Description	Points (base scenario)
Scenario 1	The person did not have any problem or the person does not know if he had a problem or not	10
Scenario 2	The person had a problem and the only reason why he did not complain is that the sum involved is too small	8
Scenario 3	The person had a problem and one of the reasons (but not the only one) why he did not complain is that the sum involved is too small	4
Scenario 4	The person had a problem and the low sum involved is NOT among the reasons why he did not complain	0
Scenario 5	The person had a problem and he complained about it but he does not know to whom or he claims to have complained to one of the parties NOT listed under question Q10	1
Scenario 6	The person had a problem and he complained about it to the retailer or the manufacturer (regardless of the fact that he could have also complained also to other parties) and he had a satisfactory answer from at least one of the two parties	8
Scenario 7	The person had a problem and he complained about it to the retailer or the manufacturer (to one of the two or to both of them, but not to any other party). He did not have a satisfactory answer from any of the two (or he does not know if the response was satisfactory or not).	4
Scenario 8	The person had a problem and he complained about it to the retailer or the manufacturer and he did not have a satisfactory answer from any of the two (or he does not know what the result was). However, he also complained to another party and he got a satisfactory result from one of these.	6
Scenario 9	The person had a problem and he complained about it to the retailer or the manufacturer and he did not have a satisfactory answer from any of the two (or he does not know what the result was). In addition, he also complained to another party but he did not get a satisfactory result either (or he does not know what was the result)	2
Scenario 10	The person had a problem and he DID complained about it NEITHER to the retailer NOR the manufacturer. However, he complained about it to another party and he did get a satisfactory result from any of these parties	5
Scenario 11	The person had a problem and he DID complained about it NEITHER to the retailer NOR the manufacturer. However, he complained about it to another party but he did not get a satisfactory result (or he does not know what was the result)	1

Source: Consumers Directorate of DG Justice and Consumers. Unit E1 Consumer Markets

These 11 scenarios and their respective scores can be used to construct a composite indicator on problems and complaints at the respondents' level. This composite indicator for the j^{th} respondent (CI_j) takes the form:

$$CI_j = \sum_{i=1}^{11} S_{ij} w_i \quad (1)$$

S_{ij} is a dummy variable indicating to which scenario i the respondent j belongs and w_i is the respective score for the scenario i (as indicated in Table 38). Subsequently, to allow cross-country comparisons and extrapolate population estimations on problems and complaints at country level, a composite indicator for each country (CI_c) is constructed as follows:

$$CI_c = \frac{\sum_{j=1 \in c}^N CI_j P_j}{\sum_{j=1 \in c}^N P_j} \quad (2)$$

This indicator is basically aggregating the composite indicators of the respondents (CI_j) by calculating the weighted average per country using the survey weights (P_j) that allow for population estimations.

The main advantages of this methodology reside in the use of the whole survey sample and the fact that not complaining is not necessarily penalised. One drawback of this method is the rather arbitrary judgement of the scenario points. The hierarchy of scenarios depends on the researcher's opinion and hence it can be strongly criticised. In order to overcome this critique we perform an uncertainty analysis to detect whether the composite indicator are robust against “reasonable” changes in the scenario scores. Therefore we allow scenario scores to vary within a certain range (see Table 39) and perform 30,000 Monte Carlo simulations in which a score is randomly chosen within its range for each scenario. We calculate the 28 EU country composite indicators based on equation (2) for each of these simulations.

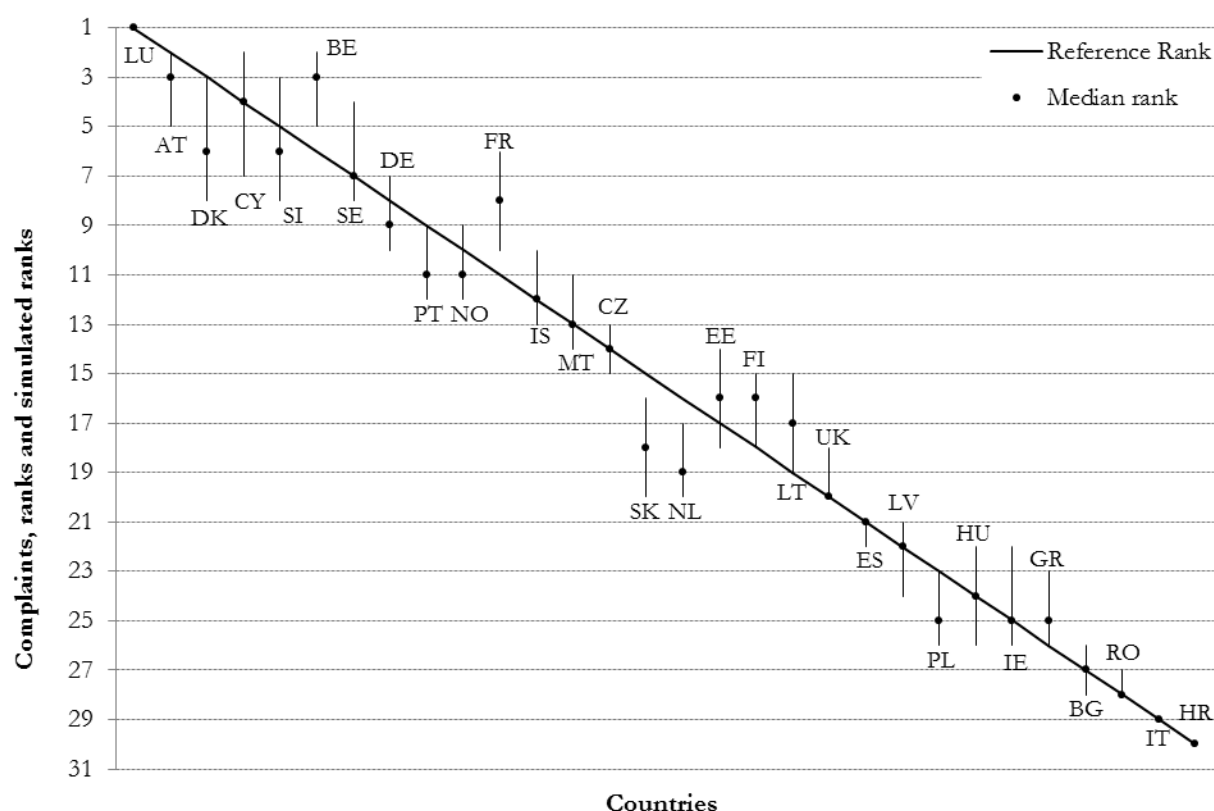
Table 39 Scenario descriptions and score range for simulations

Scenario	Description	Points (base scenario)	Points simulations
Scenario 1	The person did not have any problem or the person does not know if he had a problem or not	10	9-10
Scenario 2	The person had a problem and the only reason why he did not complain is that the sum involved is too small	8	7-9
Scenario 3	The person had a problem and one of the reasons (but not the only one) why he did not complain is that the sum involved is too small	4	4-7
Scenario 4	The person had a problem and the low sum involved is NOT among the reasons why he did not complain	0	0-5
Scenario 5	The person had a problem and he complained about it but he does not know to whom or he claims to have complained to one of the parties NOT listed under question Q10	1	1-3
Scenario 6	The person had a problem and he complained about it to the retailer or the manufacturer (regardless of the fact that he could have also complained also to other parties) and he had a satisfactory answer from at least one of the two parties	8	7-9
Scenario 7	The person had a problem and he complained about it to the retailer or the manufacturer (to one of the two or to both of them, but not to any other party). He did not have a satisfactory answer from any of the two (or he does not know if the response was satisfactory or not).	4	2-4
Scenario 8	The person had a problem and he complained about it to the retailer or the manufacturer and he did not have a satisfactory answer from any of the two (or he does not know what the result was). However, he also complained to another party and he got a satisfactory result from one of these.	6	6-7
Scenario 9	The person had a problem and he complained about it to the retailer or the manufacturer and he did not have a satisfactory answer from any of the two (or he does not know what the result was). In addition, he also complained to another party but he did not get a satisfactory result either (or he does not know what was the result)	2	2-4
Scenario 10	The person had a problem and he DID complained about it NEITHER to the retailer NOR the manufacturer. However, he complained about it to another party and he did get a satisfactory result from any of these parties	5	3-5
Scenario 11	The person had a problem and he DID complained about it NEITHER to the retailer NOR the manufacturer. However, he complained about it to another party but he did not get a satisfactory result (or he does not know what was the result)	1	0-2

Source: Consumers Directorate of DG Justice and Consumers. Unit E1 Consumer Markets and JRC, Ispra

The main results of the uncertainty analysis are shown in Figure 12 with median ranks and 90% confidence intervals computed across the 30000 Monte Carlo simulations for the country composite indicators. Countries are ordered from the best to the worst according to their reference rank based on the scenario points of Figure 12 (black line), the dot being the median rank. Error bars represent, for each country, the 90% interval across all simulations. When comparing the reference ranks with the median ranks, results are reassuring: the median rank is close to the reference rank for the majority of the countries, less than 3 positions for about 83% of the countries. Only for five countries this difference equals to three (Denmark, Belgium, France, Slovakia, and the Netherlands).

Figure 12 Uncertainty analysis (reference rank vs. median rank, 90% confidence intervals)



Note: Country names corresponding to the country codes can be found in appendix.

Table 40 reports the original rankings of the country composite indicator based on scenario points of Table 38, the simulated median and the 90% confidence intervals for the simulated rank (using points simulation from Table 39). These confidence intervals account for the uncertainty in the rankings due to the ranges of the scenario points used in the simulations. The range of the intervals remains rather small, within ranges of 3 or less positions for almost 70% of the countries. Only three countries record ranges of 5 positions: Denmark, Cyprus and Slovenia. The range intervals for the four countries at the end of the ranking remain very stable, indicating that reasonable changes in the scenario scores do not alter their positions.

Table 40 Country ranks and range intervals for the composite indicators on problems and complaints

Country	Rank	Median Rank	Interval	Country	Rank	Median Rank	Interval
LU	1	1	[1, 1]	NL	16	19	[17, 20]
AT	2	3	[2, 5]	EE	17	16	[14, 18]
DK	3	6	[3, 8]	FI	18	16	[15, 18]
CY	4	4	[2, 7]	LT	19	17	[15, 19]
SI	5	6	[3, 8]	UK	20	20	[18, 20]
BE	6	3	[2, 5]	ES	21	21	[21, 22]
SE	7	7	[4, 8]	LV	22	22	[21, 24]
DE	8	9	[7, 10]	PL	23	25	[23, 26]
PT	9	11	[9, 12]	HU	24	24	[22, 26]
NO	10	11	[9, 12]	IE	25	25	[22, 26]
FR	11	8	[6, 10]	GR	26	25	[23, 26]
IS	12	12	[10, 13]	BG	27	27	[26, 28]
MT	13	13	[11, 14]	RO	28	28	[27, 28]
CZ	14	14	[13, 15]	IT	29	29	[29, 29]
SK	15	18	[16, 20]	HR	30	30	[30, 30]

Note: Country names corresponding to the country codes can be found in appendix.

Overall, the results of the uncertainty analyses suggest that the country composite indicator based on the proposed scenario methodology provides a fairly reliable picture of the countries' performance that is not excessively driven by methodological assumptions on scenario scores.

2.2.2 Indicators on consumers' knowledge of their rights

The EC survey of consumers includes several questions to measure consumers' knowledge and awareness of the legislation and their rights. It includes following questions:

Q6 Suppose you ordered a new electronic product by post, phone or the Internet, do you think you have the right to return the product 4 days after its delivery and get your money back, without giving any reason?

1. *Yes*
2. *No*
3. *It depends on the product*
4. *DK/NA*

The variable in the survey dataset that includes the individuals' responses to the question is q6. The variable is coded with values 1, 2, 3, or 4.

Q7 Imagine that an electronic product you bought new 18 months ago breaks down without any fault on your part. You didn't buy or benefit from any extended commercial guarantee. Do you have the right to have it repaired or replaced for free?

1. *Yes*
2. *No*
3. *It depends on the product*
4. *DK/NA*

The variable that includes the individuals' responses is coded as q7 and contains the values 1, 2, 3, or 4.

Q8 Imagine you receive two educational DVDs by post that you have not ordered, together with a 20 euro invoice for the goods. Are you obliged to pay the invoice?

1. *No, and you are not obliged to return the DVDs*
2. *No, provided that you return the DVDs It depends on the product*
3. *Yes, you are obliged to pay*
4. *DK/NA*

Variable q8 contains the survey response for question 8 and are labelled with values from 1 to 4.

The Consumer and Cross-border Trade report conducted by TNS Political & Social for the Consumers Directorate of DG Justice and Consumers (European Commission, 2014) contains weighted results per country for the EC survey on consumers that was surveyed in 2014. With respect to questions 6, 7 and 8 TNS already calculated aggregated summary statistics for the various countries. As such it contains weighted country percentages for the following categories: 1) at least one correct answer, 2) no correct answers, 3) 1 correct answer, 4) 2 correct answers, 5) 3 correct answers, 6) at least one wrong answer and 7) at least one answer DK. In addition, this report includes weighted country percentages for the average of correct answers, the average of wrong answers and DK/NA. We advise to use the weighted percentage of average correct answers as indicator to assess consumers' knowledge of the legislation and their rights. The country percentages are calculated as the sum of correct answers of all the respondents of a country divided by the total number of questions asked in that country (equals to 3 questions per

respondent). The information in the table is calculated on weighted data, i.e. corrected with the survey weights on socio-demographic characteristics of the respondents. These weights are applied to correct for differences between the sample and the general population in the country, so that these numbers and percentages can be interpreted as estimations of population data. The weighted percentages are presented in Table 41.

Table 41 Knowledge and awareness of consumers' rights

Country	Total	Average of correct answers		Average of wrong answers		DK/NA	
	Number obs	Number obs	Percent	Number obs	Percent	Number obs	Percent
EU28	79770	34179	43%	43014	54%	2577	3%
BE	3003	1226	41%	1723	57%	54	2%
BG	3000	1168	39%	1708	57%	123	4%
CZ	3000	1688	56%	1218	41%	95	3%
DK	3012	1616	54%	1244	41%	152	5%
DE	3000	1542	51%	1369	46%	89	3%
EE	3000	1328	44%	1448	48%	224	8%
IE	3000	1220	41%	1711	57%	68	2%
EL	3003	737	25%	2167	72%	99	3%
ES	3003	1409	47%	1521	51%	74	2%
FR	3009	1077	36%	1845	61%	87	3%
HR	3018	935	31%	1985	66%	98	3%
IT	3009	1451	48%	1489	50%	68	2%
CY	1500	579	38%	790	53%	132	9%
LV	3003	1245	41%	1585	53%	174	6%
LT	3000	878	29%	1930	64%	192	7%
LU	1500	506	34%	943	63%	51	3%
HU	3018	1042	35%	1840	61%	136	4%
MT	1512	703	46%	737	49%	72	5%
NL	3003	1235	41%	1697	57%	71	2%
AT	3003	1324	44%	1567	52%	112	4%
PL	3000	1290	43%	1559	52%	152	5%
PT	3003	1186	40%	1716	57%	101	3%
RO	3036	1069	35%	1821	60%	146	5%
SI	3033	1278	42%	1641	54%	113	4%
SK	3075	1723	56%	1208	39%	144	5%
FI	3006	1129	37%	1768	59%	109	4%
SE	3000	1308	44%	1558	52%	134	4%
UK	3021	1109	37%	1824	60%	88	3%
IS	1503	650	43%	769	51%	84	6%
NO	3000	1560	52%	1263	42%	177	6%

Note: Country names corresponding to the country codes can be found in appendix.

Source: European Commission (2014, p. 40-41)

2.2.3 Indicators on consumers' trust

Statements in question 3 of the EC survey on consumers is related to consumers' trust in authorities handling consumer rights and to consumers' perception in the ease of settling disputes.

Q3 How strongly do you agree or disagree with each of the following statements. In (OUR COUNTRY)...

- 1. You trust public authorities to protect your rights as a consumer*
- 2. In general, retailers and service providers respect your rights as a consumer*
- 3. You trust non-governmental consumer organisations to protect your rights as a consumer*
- 4. It is easy to settle disputes with retailers and service providers through an out-of-court body (i.e. arbitration, mediation or conciliation body)*
- 5. It is easy to settle disputes with retailers and service providers through the courts*
- 6. Most environmental claims about goods or services are reliable*

Scale: 1 = Very satisfied, 2 = Fairly satisfied, 3 = Not very satisfied, 4 = Not at all satisfied, 5 = DK/NA

The survey variables which include the answers to question q3 are the following: q3_1, q3_2, q3_3, q3_4, q3_5, and q3_6.

One indicator that could be used to assess consumers' trust is the average trust rate across these six items. The average trust levels for each country are presented in Table 42. They are calculated by taking the average of the trust perception on these six items for every respondent, and then by averaging them per country. The original scale of the survey assigns lower values to higher levels of trust. For the calculations in Table 42 we reversed the scale such that higher scores indicate higher levels of average trust among consumers in the country. High levels of consumer trust are recoded for Denmark (2.808), Finland (2.802), and Luxembourg (2.848), and the lowest level in Bulgaria (2.299) and Croatia (2.337). The average level of consumer trust in the EU28 is 2.594.

Table 42 Average trust of consumers (EU28)

Country	Average trust	Country	Average trust	Country	Average trust
AT	2.792	FR	2.616	NL	2.708
BE	2.706	GR	2.414	PL	2.579
BG	2.299	HR	2.337	PT	2.534
CY	2.371	HU	2.752	RO	2.483
CZ	2.412	IE	2.725	SE	2.617
DE	2.625	IT	2.452	SI	2.343
DK	2.808	LT	2.522	SK	2.574
EE	2.793	LU	2.848	UK	2.796
ES	2.514	LV	2.581	EU 28	2.594
FI	2.802	MT	2.714		

Note: Country names corresponding to the country codes can be found in appendix. Countries with a score above the EU average are indicated in red.

As this average trust indicator is equally weighting the various options of question 3, we also constructed a trust index based on principal component analysis with nonlinear optimal scaling transformations (Linting et al, 2007). Traditionally, principal component analysis is used to reduce the dimensionality of variables while keeping most of the information found in the original variables. However, the widely-used PCA suffers from two important limitations. First, this method assumes linear relationships between numerical variables. Second, the interpretation of its results is only sensible if all the variables are scaled at the numerical level. To overcome these limitations, non-linear principal component analysis – also called categorical or polychoric principal component analysis - has been developed (Filters, 1999). This method is ideally when dealing with survey data using Likert scales (e.g. with options going from strongly agree to strongly disagree). We performed a categorical PCA analysis to obtain z-scores for each individual respondent that contains his overall trust level. A disadvantage of this principal component analysis is that it cannot be performed in case of missing data. Hence, we can only include individuals that filled in all the options in question 3, hence leading to some loss in observations. The results are in this case highly similar to the equally weighted ones of Table 42, as both indicators correlate at 0.995. We advise however to use this method for every average indicator that is used in order to check whether principal component analysis for categorical variables provides similar or different results.⁴⁹

⁴⁹ This principal component analysis for categorical variables could not be performed for consumer satisfaction in paragraph 2.2.1 as the options of question 11 are related to different target groups.

2.2.4 Indicators on prevalence of UCP

The EC survey on consumers contains several questions to measure the prevalence of unfair commercial practices.

Q13 I will read you some statements about unfair commercial practices. After each one, please tell me whether you have experienced it during the last 12 months...?

- 1. You have been informed you won a lottery you did not know about, but you were asked to pay some money in order to collect the prize*
- 2. You have felt pressured by persistent sales calls or messages urging you to buy something or sign a contract*
- 3. You have been offered a product advertised as free of charge which actually entailed charges*
- 4. You have come across advertisements stating that the product was only available for a very limited period of time but you later realised that it was not the case*
- 5. You have come across other unfair commercial practices*

This question is asked to all the respondents of the survey and multiple answers are possible. For each of the options, individuals have to tick on whether they experienced the situation in their own country, in another EU country, or whether they don't remember the location of the retailer or service provider. The country averages of the number of unfair commercial practices experienced by consumers as based on question 13 are presented in Table 43. The column "Average UCP" displays the results for all the individuals of the database. As the number of distribution of respondents' answers is highly skewed (e.g. 10069 reply not having encountered an unfair commercial practice), we also present the average results for respondents that have at least mentioned one experience of UCP in question 13 (results in column 'Average UCP 2'). High levels of UCP experiences are recorded for Spain (1.927), Croatia (1.991), and Poland (1.956), and the lowest level in Germany (0.810), Malta (0.954) and the Netherlands (0.899). The average level of consumer experience with UCP in the EU28 is 1.361. Comparing the country rankings based on the two average UCP columns, we find out that most of the countries are equally ranked or have small rank changes (ranks are not reported in the table). Only three countries differ significantly once 'Average UCP 2' is considered: Belgium and United Kingdom increase of 10 positions in the ranking of countries with highest experiences with UCP while Italy is now amongst the countries with lowest experiences with UCP.

Table 43 Average unfair commercial practices per country (Q13, EU28)

Country	Average UCP	Average UCP 2	Country	Average UCP	Average UCP 2	Country	Average UCP	Average UCP 2
AT	1.045	1.951	FR	1.455	2.280	NL	0.899	1.708
BE	1.117	2.105	GR	1.711	2.290	PL	1.956	2.511
BG	1.340	2.090	HR	1.991	2.410	PT	1.122	1.946
CY	1.320	1.970	HU	1.568	2.131	RO	1.352	2.089
CZ	1.504	2.189	IE	1.247	2.049	SE	1.467	2.142
DE	0.810	1.845	IT	1.360	1.897	SI	1.056	1.880
DK	1.255	2.005	LT	1.257	1.953	SK	1.747	2.427
EE	1.089	1.659	LU	1.110	2.011	UK	1.167	2.110
ES	1.927	2.418	LV	1.501	2.104	EU 28	1.361	2.102
FI	1.423	2.088	MT	0.954	1.736			

Note: Country names corresponding to the country codes can be found in appendix. Countries with a score above the EU average are indicated in red.

This example shows that it is difficult to find one indicator that allows for country comparisons in terms of UCP experiences. Other questions in the survey relating to UCP experiences (question 14, 15 and 16) are even more difficult to assess since they all target other respondent groups (e.g. consumers that have experiences in shopping online, consumers did have experiences in shopping abroad). Therefore we strongly recommend not combining information of these questions into one composite indicator to measure the prevalence of unfair commercial practices.

2.2.5 Indicators on consumer conditions

We suggest considering the updated framework on consumer conditions as a basis for future versions of the consumer conditions index. In a first stage the different indicators that populate the index could be placed in one of the three pillars: 1) knowledge awareness and trust, 2) compliance and enforcement and 3) complaints and dispute resolution.

Chapter 2.5 presents the development of the 10th consumer conditions index. The indicators that feed into the index are partially coinciding with the country indicators proposed in this chapter, while new indicators are proposed after reflection from and discussion with the unit E1 of DG Justice and Consumers.

2.3 Analysis of the sample structure of the EC surveys on “Consumers’ attitudes towards cross-border trade and consumer protection”

Violeta Piculescu and Vincent Van Roy

In this chapter we compare the sample structure of the EC survey of consumers with population data reported by Eurostat with respect to distributions across age groups and gender in order to assess the representativity of the sample survey data at the country level.

2.3.1 Comparison of the sample structure of the EC survey on consumers and population data by age groups

The EC survey on consumers includes individuals of at least 15 years of age for all EU-28 countries, Iceland and Norway. The sample for the EU-28 countries includes 26590 observations, while Iceland and Norway report respectively 501 and 1000 observations (Table 44). The average age of individuals in the EU-28 sample is 52, and the maximum age is 98. The unweighted sample for the EU-28 includes 58.5% females, while this percentage is reduced to 51.9% when applying weights.⁵⁰

In the survey dataset of the EC survey on consumers, the variables we use for the analysis of the sample structure are the following: b for country, vd1 for age, d2 for gender, and w1 for survey weights. Based on the variable for age, we construct 8 variables for 10-years age intervals as follows: 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, and 85 and over. The proportions of sample individuals in these age groups, calculated based on unweighted and weighted data, are included in Table 45. In the same table we also include the proportions of the same age groups in the total population of at least 15 years old at the national level. These proportions are calculated based on Eurostat data for year 2013.

The Table 45 of proportions of age groups reads as follows. In Austria, for instance, 6.29% of individuals in the sample are in the age group 15-24, representing (based on weighted data) 14.28% of the population in the country. The Eurostat data indicates that the proportion of the

⁵⁰ The survey includes some weights that correct for socio-demographic characteristics of the respondents so that the survey data corrected with these weights can be interpreted as estimations of population data.

Austrian population in the age group 15-24 is 13.84%, thus very similar to the corresponding sample proportion. When looking across the eight age intervals, we note that the elderly individuals in the group 85 years old and over are rather under sampled in Austria.

Although we did not apply a systematic statistical test for the comparison of the sample structure with the population structure, a straightforward measure that can be used for a preliminary screening of sample imbalances can be calculated as follows⁵¹:

$$Diff = \sqrt{\sum_{i=Age\ Intervals} (EurostatProportion_i - EBWeightedProportion_i)^2}$$

Higher values calculated for the measure DIFF indicate more unbalanced samples.

The differences calculated at country level, and reported in the last column in Table 45, indicate that samples are relatively balanced for most EU countries, with Czech Republic, Finland, UK, and Norway having the smallest differences between the sample proportions and the population shares across the 10-years age intervals. Larger differences between the sample structure and population data are apparent for Latvia, Spain, Iceland, Romania and Sweden. In Latvia, for instance, the individuals in the first age group (15-24) are oversampled (20.98% in the sample, relative to 13.72% in the population), while individuals in the age group 65-74 are under-sampled to a larger extent (7.11% in the sample, relative to 11.62% in the population).

2.3.2 Comparison of the sample structure of the EC survey on consumers and population data on females by age groups

An analysis based on data disaggregated by gender across the age intervals leads to similar conclusions. In Table 46 we include the proportions of female individuals in the sample of the EC survey on consumers, and the corresponding proportions in the population at country level, calculated based on Eurostat data. The table reads as follows. In Austria, the proportion of

⁵¹ For this comparison we use the weighted EB data as we want to compare Eurostat population data with population estimations based on the EB sample (i.e. weighted sample).

female individuals in the age group 15-24 in the total sample for Austria is 2.30%, representing 6.90% of the population at country level. The Eurostat data indicates that, in 2013, the proportion of females in the same age group amounts to 6.77%. Overall, we note that, even when disaggregated by gender, the surveys samples at country level appear balanced for most of the EU-28 countries.

2.3.3 Conclusions

In this chapter we compare the sample structure of the EC survey of consumers with the distribution of population by age groups and gender at country level. The general conclusion of this analysis is that the samples of consumers in the EC survey are, with few exceptions, relatively balanced across EU-28 Member States with respect to distributions across age intervals and gender. For future waves of the survey we have two recommendations. First, we recommend the public provision of detailed technical specifications of the survey sampling design and the survey weights. Second, given the relevance of education of individuals for consumer issues, we recommend including also the level of education as a criterion for the sampling procedure.⁵²

⁵² We could not analyse the sample structure with respect to education in the current study due to the lack of survey data on education comparable with population data on education levels.

Table 44 Sample data in EC survey on consumers

Country	Number of obs.	Average age	Maximum age	% Females (unweighted)	% Females (weighted)	% Males (weighted)
AT	1001	55	90	54.2%	51.5%	48.5%
BE	1001	52	94	58.0%	51.4%	48.6%
BG	1000	52	93	62.2%	52.1%	47.9%
CY	500	46	87	52.2%	51.9%	48.1%
CZ	1000	53	94	60.5%	51.3%	48.7%
DE	1000	56	94	58.6%	51.5%	48.5%
DK	1004	57	96	60.4%	50.8%	49.2%
EE	1000	56	94	67.8%	55.7%	44.3%
ES	1001	45	88	55.0%	51.2%	48.8%
FI	1002	56	94	53.2%	51.4%	48.6%
FR	1003	55	96	57.6%	52.3%	47.7%
GR	1001	45	86	58.9%	51.0%	49.0%
HR	1006	51	90	65.5%	52.4%	47.6%
HU	1006	52	91	59.9%	53.3%	46.7%
IE	1000	55	92	59.4%	51.9%	48.1%
IS	501	51	93	52.5%	49.0%	51.0%
IT	1003	52	92	61.3%	51.9%	48.1%
LT	1000	47	91	59.2%	54.3%	45.7%
LU	500	50	88	52.4%	50.4%	49.6%
LV	1001	51	90	60.5%	53.6%	46.4%
MT	504	51	92	67.5%	50.8%	49.2%
NL	1001	58	96	54.2%	51.7%	48.3%
NO	1000	55	94	50.0%	50.4%	49.6%
PL	1000	50	88	58.1%	52.3%	47.7%
PT	1001	45	88	58.4%	52.3%	47.7%
RO	1012	46	91	51.7%	51.7%	48.3%
SE	1000	58	96	50.6%	49.0%	51.0%
SI	1011	54	93	62.9%	50.8%	49.2%
SK	1025	48	86	56.9%	51.9%	48.1%
UK	1007	55	98	58.7%	51.9%	48.1%
<i>EU28</i>	<i>26590</i>	<i>52</i>	<i>98</i>	<i>58.5%</i>	<i>51.9%</i>	<i>48.1%</i>

Note: Country names corresponding to the country codes can be found in appendix.

Table 45 Distribution of sample individuals and population across age groups, 2013

Country	Source	Pop. age 15-24	Pop. age 25-34	Pop. age 35-44	Pop. age 45-54	Pop. age 55-64	Pop. age 65-74	Pop. age 75-84	Pop. age 85 and over	Diff
AT	EB 358 unweighted	6.29%	8.69%	10.79%	20.48%	20.48%	22.08%	9.79%	1.40%	0.054
	EB 358 weighted	14.28%	15.33%	15.35%	21.72%	13.33%	13.21%	5.88%	0.89%	
	Eurostat	13.84%	15.06%	16.33%	18.50%	13.73%	11.46%	6.50%	4.59%	
BE	EB 358 unweighted	11.29%	8.39%	12.89%	18.88%	21.28%	18.18%	7.39%	1.70%	0.056
	EB 358 weighted	14.60%	15.34%	16.57%	18.46%	14.51%	13.73%	5.53%	1.26%	
	Eurostat	14.20%	15.31%	15.98%	17.15%	14.58%	10.35%	7.53%	4.90%	
BG	EB 358 unweighted	6.60%	12.60%	14.90%	16.70%	22.10%	19.80%	6.60%	0.70%	0.053
	EB 358 weighted	14.27%	16.00%	17.23%	16.29%	15.92%	14.75%	5.07%	0.47%	
	Eurostat	12.36%	15.52%	16.93%	15.27%	16.26%	12.28%	7.66%	3.73%	
CY	EB 358 unweighted	12.60%	16.20%	16.80%	20.40%	16.20%	13.40%	3.40%	1.00%	0.047
	EB 358 weighted	17.27%	18.86%	17.97%	16.89%	13.16%	12.23%	2.86%	0.76%	
	Eurostat	17.70%	19.97%	16.60%	15.70%	13.26%	9.14%	5.00%	2.63%	
CZ	EB 358 unweighted	6.10%	10.80%	15.50%	15.30%	21.50%	21.80%	7.40%	1.60%	0.037
	EB 358 weighted	14.61%	16.66%	18.87%	15.66%	16.45%	12.31%	4.50%	0.94%	
	Eurostat	12.85%	16.74%	18.47%	14.76%	16.09%	11.63%	5.93%	3.54%	
DE	EB 358 unweighted	5.70%	7.50%	10.60%	17.40%	22.80%	21.10%	12.80%	2.10%	0.047
	EB 358 weighted	12.67%	12.97%	14.28%	20.50%	14.50%	14.85%	8.66%	1.57%	
	Eurostat	12.32%	13.90%	14.81%	18.89%	14.73%	12.20%	8.29%	4.87%	
DK	EB 358 unweighted	7.87%	5.28%	12.05%	15.04%	21.22%	21.61%	13.05%	3.88%	0.053
	EB 358 weighted	15.17%	11.36%	20.20%	17.23%	15.70%	11.91%	6.50%	1.93%	
	Eurostat	15.29%	13.85%	16.20%	17.08%	14.80%	12.65%	6.20%	3.91%	
EE	EB 358 unweighted	5.50%	10.20%	12.10%	15.60%	18.70%	20.60%	15.10%	2.20%	0.053
	EB 358 weighted	16.63%	18.20%	16.17%	16.17%	13.19%	10.71%	7.90%	1.03%	
	Eurostat	13.70%	16.44%	16.01%	15.65%	14.96%	10.97%	7.67%	4.60%	
ES	EB 358 unweighted	11.49%	13.39%	21.78%	25.37%	15.78%	9.69%	2.40%	0.10%	0.091
	EB 358 weighted	11.89%	15.88%	20.30%	18.39%	13.13%	16.36%	3.93%	0.13%	
	Eurostat	11.39%	16.27%	19.60%	17.18%	13.09%	9.84%	7.65%	4.97%	
FI	EB 358 unweighted	7.19%	9.08%	10.58%	14.87%	17.37%	24.35%	13.67%	2.89%	0.043
	EB 358 weighted	14.77%	14.16%	14.62%	18.46%	17.59%	12.26%	6.77%	1.36%	
	Eurostat	14.28%	14.83%	14.21%	16.09%	16.62%	12.22%	7.12%	4.64%	
FR	EB 358 unweighted	6.58%	9.27%	12.26%	17.05%	21.14%	21.83%	9.47%	2.39%	0.056
	EB 358 weighted	15.02%	15.04%	15.77%	17.33%	15.86%	13.56%	5.99%	1.42%	
	Eurostat	14.53%	14.73%	16.00%	16.33%	15.19%	10.25%	7.51%	5.46%	
GR	EB 358 unweighted	11.99%	13.79%	21.88%	23.98%	15.38%	9.19%	3.50%	0.30%	0.081
	EB 358 weighted	16.83%	15.35%	19.40%	15.80%	13.01%	13.77%	5.31%	0.52%	
	Eurostat	12.14%	15.61%	17.32%	15.98%	13.71%	11.39%	8.93%	4.92%	
HR	EB 358 unweighted	8.95%	11.03%	16.90%	17.20%	21.47%	16.90%	6.86%	0.70%	0.074
	EB 358 weighted	14.98%	13.40%	19.73%	17.37%	14.11%	13.98%	5.85%	0.57%	
	Eurostat	13.51%	15.54%	15.26%	16.64%	16.09%	11.17%	7.92%	3.86%	
HU	EB 358 unweighted	5.77%	10.14%	16.80%	14.81%	27.53%	18.19%	6.26%	0.50%	0.064
	EB 358 weighted	14.47%	14.42%	21.31%	16.71%	14.48%	13.53%	4.70%	0.38%	
	Eurostat	13.85%	15.37%	18.16%	14.45%	16.61%	11.20%	6.53%	3.83%	
IE	EB 358 unweighted	6.00%	5.40%	10.50%	21.90%	24.20%	20.70%	10.40%	0.90%	0.067
	EB 358 weighted	15.80%	16.55%	17.83%	21.21%	13.50%	9.87%	4.82%	0.41%	
	Eurostat	14.83%	19.72%	19.43%	16.34%	13.04%	8.93%	4.87%	2.85%	
IS	EB 358 unweighted	8.78%	7.98%	18.36%	20.16%	20.56%	14.97%	7.19%	2.00%	0.087
	EB 358 weighted	17.44%	12.98%	22.64%	18.13%	13.43%	10.20%	4.01%	1.18%	
	Eurostat	18.22%	17.50%	16.14%	16.67%	14.03%	8.67%	5.36%	3.42%	

Table 44 Distribution of sample individuals and population across age groups, 2013 (cont.)

Country	Source	Pop. age 15-24	Pop. age 25-34	Pop. age 35-44	Pop. age 45-54	Pop. age 55-64	Pop. age 65-74	Pop. age 75-84	Pop. age 85 and over	Diff
IT	EB 358 unweighted	5.18%	9.27%	18.54%	23.33%	20.84%	14.86%	6.98%	1.00%	0.064
	EB 358 weighted	11.74%	12.56%	19.34%	18.57%	14.26%	15.44%	7.09%	1.00%	
	Eurostat	11.25%	13.24%	17.61%	17.37%	14.19%	12.06%	8.60%	5.69%	
LT	EB 358 unweighted	11.70%	16.60%	16.40%	19.10%	15.50%	12.70%	7.20%	0.80%	0.056
	EB 358 weighted	18.00%	16.57%	15.36%	18.63%	12.54%	11.60%	6.53%	0.76%	
	Eurostat	15.51%	14.27%	15.46%	17.54%	13.98%	10.79%	7.90%	4.54%	
LU	EB 358 unweighted	11.60%	8.40%	17.20%	22.40%	16.60%	16.00%	7.20%	0.60%	0.068
	EB 358 weighted	14.65%	13.68%	21.77%	19.69%	13.35%	11.74%	4.74%	0.38%	
	Eurostat	14.42%	17.37%	18.56%	18.27%	13.23%	8.69%	5.87%	3.59%	
LV	EB 358 unweighted	10.19%	14.29%	14.49%	16.58%	17.18%	16.78%	8.79%	1.70%	0.113
	EB 358 weighted	20.98%	19.98%	17.26%	17.74%	12.49%	7.11%	3.69%	0.75%	
	Eurostat	13.72%	15.89%	15.55%	16.48%	14.60%	11.62%	7.68%	4.45%	
MT	EB 358 unweighted	10.91%	11.31%	13.49%	14.68%	22.62%	16.27%	9.72%	0.99%	0.061
	EB 358 weighted	17.32%	14.59%	16.61%	19.15%	15.73%	9.91%	6.10%	0.59%	
	Eurostat	15.23%	16.74%	15.14%	15.33%	16.26%	11.72%	6.20%	3.38%	
NL	EB 358 unweighted	3.10%	5.49%	12.69%	17.78%	22.18%	22.58%	13.09%	3.10%	0.075
	EB 358 weighted	9.49%	14.33%	20.51%	20.23%	16.77%	11.08%	6.16%	1.44%	
	Eurostat	14.51%	14.39%	16.28%	17.88%	15.34%	11.39%	6.30%	3.91%	
NO	EB 358 unweighted	6.30%	9.20%	12.70%	18.00%	18.30%	21.80%	10.70%	3.00%	0.038
	EB 358 weighted	15.79%	16.39%	16.33%	18.42%	14.94%	11.33%	5.32%	1.46%	
	Eurostat	15.88%	15.91%	17.26%	16.38%	14.17%	10.47%	5.70%	4.23%	
PL	EB 358 unweighted	8.50%	12.10%	15.00%	18.90%	23.60%	16.30%	5.20%	0.40%	0.070
	EB 358 weighted	16.59%	15.75%	17.91%	18.19%	15.60%	11.64%	4.06%	0.25%	
	Eurostat	14.76%	19.03%	16.25%	15.27%	16.49%	8.71%	6.01%	3.48%	
PT	EB 358 unweighted	15.18%	15.78%	18.28%	18.48%	16.38%	10.79%	4.40%	0.70%	0.077
	EB 358 weighted	16.84%	16.87%	17.93%	15.86%	12.98%	13.48%	5.24%	0.81%	
	Eurostat	12.30%	14.49%	17.67%	16.61%	14.54%	11.37%	8.21%	4.81%	
RO	EB 358 unweighted	12.94%	16.21%	16.80%	19.47%	19.66%	11.17%	3.46%	0.30%	0.083
	EB 358 weighted	17.63%	19.03%	17.32%	15.84%	12.63%	13.44%	3.78%	0.34%	
	Eurostat	13.76%	16.30%	18.75%	14.44%	16.02%	10.26%	7.05%	3.41%	
SE	EB 358 unweighted	4.40%	5.20%	13.80%	15.60%	18.80%	26.80%	12.40%	3.00%	0.083
	EB 358 weighted	13.29%	10.59%	20.91%	16.91%	15.91%	14.36%	6.43%	1.60%	
	Eurostat	15.23%	14.84%	15.55%	15.66%	14.34%	12.59%	6.88%	4.90%	
SI	EB 358 unweighted	6.13%	9.89%	13.06%	17.41%	20.08%	20.87%	10.58%	1.98%	0.053
	EB 358 weighted	13.51%	16.79%	19.39%	16.24%	14.84%	12.48%	5.69%	1.06%	
	Eurostat	12.02%	16.42%	16.75%	17.21%	16.00%	10.36%	7.09%	4.15%	
SK	EB 358 unweighted	8.10%	15.80%	18.63%	17.85%	21.07%	14.24%	4.20%	0.10%	0.056
	EB 358 weighted	18.16%	18.42%	19.33%	16.40%	13.46%	10.96%	3.20%	0.06%	
	Eurostat	15.17%	18.97%	17.66%	15.90%	15.60%	8.94%	4.95%	2.81%	
UK	EB 358 unweighted	5.36%	8.64%	13.31%	20.26%	18.67%	17.68%	12.02%	4.07%	0.044
	EB 358 weighted	14.64%	13.79%	17.77%	18.94%	14.34%	10.64%	7.48%	2.40%	
	Eurostat	15.39%	16.10%	15.92%	16.76%	13.63%	11.06%	6.74%	4.39%	
EU 28	EB 358 unweighted	8.14%	10.68%	14.88%	18.42%	20.10%	17.87%	8.42%	1.50%	0.051
	EB 358 weighted	15.15%	15.43%	18.07%	17.84%	14.42%	12.60%	5.57%	0.91%	
	Eurostat	13.38%	15.31%	16.65%	16.88%	14.70%	11.00%	7.42%	4.66%	

Note: Country names corresponding to the country codes can be found in appendix.

Table 46 Distribution of female sample individuals and population across age groups, 2013

Country	Source	Pop. age 15-24	Pop. age 25-34	Pop. age 35-44	Pop. age 45-54	Pop. age 55-64	Pop. age 65-74	Pop. age 75-84	Pop. age 85 and over	Diff
AT	EB 358 unweighted	2.30%	3.20%	6.59%	12.09%	10.89%	12.39%	5.89%	0.90%	0.046
	EB 358 weighted	6.90%	5.67%	9.42%	11.08%	6.85%	7.42%	3.56%	0.57%	
	Eurostat	6.77%	7.49%	8.20%	9.20%	7.05%	6.14%	3.84%	3.82%	
BE	EB 358 unweighted	5.99%	4.20%	7.79%	11.49%	12.49%	11.09%	4.40%	0.60%	0.047
	EB 358 weighted	7.21%	7.43%	8.60%	8.96%	7.32%	8.12%	3.33%	0.43%	
	Eurostat	6.98%	7.62%	7.88%	8.49%	7.36%	5.46%	4.42%	4.04%	
BG	EB 358 unweighted	3.70%	5.10%	8.50%	10.60%	14.40%	14.80%	4.70%	0.40%	0.040
	EB 358 weighted	6.96%	7.18%	9.12%	8.27%	8.51%	8.66%	3.19%	0.20%	
	Eurostat	6.00%	7.47%	8.21%	7.58%	8.59%	7.01%	4.71%	3.11%	
CY	EB 358 unweighted	5.20%	10.00%	9.40%	12.00%	7.60%	7.00%	0.60%	0.40%	0.042
	EB 358 weighted	8.41%	10.16%	8.92%	9.19%	6.66%	7.63%	0.48%	0.41%	
	Eurostat	8.67%	10.31%	9.01%	8.14%	6.72%	4.76%	2.80%	2.05%	
CZ	EB 358 unweighted	3.40%	5.40%	9.10%	8.30%	13.60%	15.20%	4.40%	1.10%	0.036
	EB 358 weighted	7.10%	7.10%	10.06%	7.85%	8.55%	7.70%	2.35%	0.58%	
	Eurostat	6.28%	8.12%	8.98%	7.27%	8.30%	6.44%	3.70%	3.02%	
DE	EB 358 unweighted	2.70%	4.40%	6.70%	10.70%	14.40%	11.50%	7.10%	1.10%	0.039
	EB 358 weighted	6.18%	6.13%	7.57%	9.82%	7.34%	8.57%	5.03%	0.87%	
	Eurostat	6.00%	6.81%	7.28%	9.28%	7.45%	6.44%	4.81%	4.03%	
DK	EB 358 unweighted	3.98%	3.19%	7.07%	9.36%	12.45%	13.35%	8.07%	2.89%	0.033
	EB 358 weighted	7.42%	5.19%	10.07%	8.96%	7.88%	6.28%	3.69%	1.30%	
	Eurostat	7.48%	6.88%	8.06%	8.46%	7.44%	6.51%	3.50%	3.14%	
EE	EB 358 unweighted	2.70%	5.70%	6.60%	10.60%	13.60%	15.40%	11.40%	1.80%	0.042
	EB 358 weighted	8.16%	9.09%	7.93%	9.62%	7.66%	7.13%	5.34%	0.78%	
	Eurostat	6.64%	7.99%	7.91%	8.11%	8.36%	6.77%	5.36%	4.15%	
ES	EB 358 unweighted	5.19%	7.49%	12.59%	15.28%	8.79%	4.70%	1.00%	0.00%	0.065
	EB 358 weighted	5.81%	7.62%	10.11%	9.16%	6.76%	9.61%	2.09%	0.00%	
	Eurostat	5.57%	8.04%	9.56%	8.57%	6.69%	5.23%	4.46%	4.02%	
FI	EB 358 unweighted	3.39%	4.49%	4.89%	7.19%	9.28%	13.77%	7.88%	2.30%	0.031
	EB 358 weighted	7.23%	7.37%	6.88%	8.97%	8.91%	6.98%	3.94%	1.08%	
	Eurostat	6.99%	7.21%	6.94%	8.00%	8.43%	6.48%	4.26%	3.91%	
FR	EB 358 unweighted	2.69%	4.49%	5.78%	10.97%	13.06%	13.16%	6.08%	1.40%	0.048
	EB 358 weighted	7.43%	7.75%	6.96%	9.70%	8.24%	7.79%	3.66%	0.76%	
	Eurostat	7.15%	7.47%	8.06%	8.31%	7.86%	5.45%	4.45%	4.44%	
GR	EB 358 unweighted	6.19%	7.89%	13.29%	15.58%	9.89%	4.10%	1.80%	0.20%	0.048
	EB 358 weighted	8.07%	7.38%	9.59%	8.27%	6.85%	7.36%	3.09%	0.39%	
	Eurostat	5.92%	7.58%	8.63%	8.21%	7.15%	6.07%	5.07%	3.88%	
HR	EB 358 unweighted	5.77%	7.85%	10.74%	11.23%	14.51%	11.53%	3.58%	0.30%	0.052
	EB 358 weighted	7.33%	7.11%	9.18%	8.92%	7.36%	9.21%	3.02%	0.23%	
	Eurostat	6.60%	7.63%	7.57%	8.42%	8.31%	6.34%	5.03%	3.39%	
HU	EB 358 unweighted	2.78%	4.97%	9.74%	9.15%	17.20%	11.63%	4.27%	0.20%	0.049
	EB 358 weighted	7.04%	6.44%	11.13%	8.94%	7.97%	8.47%	3.16%	0.15%	
	Eurostat	6.74%	7.56%	8.98%	7.38%	8.99%	6.61%	4.35%	3.31%	
IE	EB 358 unweighted	3.70%	2.70%	5.90%	14.10%	14.50%	12.40%	5.70%	0.40%	0.043
	EB 358 weighted	8.76%	8.27%	9.09%	10.78%	6.70%	5.61%	2.53%	0.18%	
	Eurostat	7.26%	10.22%	9.74%	8.21%	6.55%	4.52%	2.71%	2.31%	
IS	EB 358 unweighted	2.59%	3.79%	9.38%	11.98%	11.98%	7.39%	4.19%	1.20%	0.044
	EB 358 weighted	7.82%	6.28%	10.56%	9.42%	6.58%	5.22%	2.39%	0.72%	
	Eurostat	8.86%	8.60%	7.99%	8.42%	6.94%	4.36%	2.92%	2.65%	

**Table 45 Distribution of female sample individuals and population across age groups, 2013
(cont.)**

Country	Source	Pop. age 15-24	Pop. age 25-34	Pop. age 35-44	Pop. age 45-54	Pop. age 55-64	Pop. age 65-74	Pop. age 75-84	Pop. age 85 and over	Diff
IT	EB 358 unweighted	2.69%	4.99%	11.47%	15.15%	13.36%	8.67%	4.19%	0.80%	0.049
	EB 358 weighted	5.72%	5.46%	10.29%	9.50%	7.34%	8.65%	4.18%	0.80%	
	Eurostat	5.48%	6.60%	8.84%	8.82%	7.33%	6.42%	5.03%	4.65%	
LT	EB 358 unweighted	5.10%	8.50%	9.20%	11.00%	9.90%	9.50%	5.40%	0.60%	0.043
	EB 358 weighted	8.82%	8.06%	8.21%	9.61%	7.14%	7.71%	4.31%	0.50%	
	Eurostat	7.55%	7.04%	7.97%	9.27%	7.87%	6.72%	5.44%	4.05%	
LU	EB 358 unweighted	5.60%	4.20%	10.20%	12.40%	8.60%	8.80%	2.20%	0.40%	0.056
	EB 358 weighted	7.14%	6.06%	11.58%	9.46%	6.58%	7.49%	1.81%	0.29%	
	Eurostat	7.03%	8.63%	9.16%	8.82%	6.51%	4.53%	3.39%	3.01%	
LV	EB 358 unweighted	4.50%	6.79%	7.79%	9.69%	11.69%	12.19%	6.69%	1.20%	0.072
	EB 358 weighted	10.43%	9.49%	9.53%	9.63%	7.24%	4.41%	2.47%	0.43%	
	Eurostat	6.67%	7.80%	7.89%	8.71%	8.29%	7.34%	5.43%	4.05%	
MT	EB 358 unweighted	6.35%	7.34%	9.92%	11.31%	15.67%	11.11%	4.96%	0.79%	0.035
	EB 358 weighted	8.45%	7.00%	8.71%	9.07%	7.99%	6.30%	2.80%	0.45%	
	Eurostat	7.36%	8.07%	7.37%	7.65%	8.14%	6.17%	3.68%	2.76%	
NL	EB 358 unweighted	1.80%	3.10%	6.89%	9.09%	12.39%	11.89%	8.09%	1.00%	0.041
	EB 358 weighted	5.51%	7.29%	10.26%	9.87%	8.35%	5.98%	3.98%	0.42%	
	Eurostat	7.13%	7.16%	8.14%	8.88%	7.66%	5.82%	3.62%	3.22%	
NO	EB 358 unweighted	2.80%	4.00%	6.20%	8.60%	9.50%	11.20%	5.90%	1.80%	0.027
	EB 358 weighted	7.70%	8.32%	8.32%	8.38%	7.38%	6.20%	3.15%	0.94%	
	Eurostat	7.73%	7.77%	8.38%	7.95%	7.00%	5.35%	3.24%	3.37%	
PL	EB 358 unweighted	4.20%	6.20%	8.80%	10.90%	13.40%	11.50%	2.80%	0.30%	0.050
	EB 358 weighted	8.13%	7.89%	9.34%	8.64%	8.32%	7.77%	2.00%	0.17%	
	Eurostat	7.23%	9.38%	8.04%	7.69%	8.70%	5.00%	3.88%	3.02%	
PT	EB 358 unweighted	7.79%	9.59%	10.89%	11.29%	10.59%	5.29%	2.80%	0.20%	0.049
	EB 358 weighted	8.30%	8.60%	8.74%	8.42%	6.90%	7.51%	3.62%	0.25%	
	Eurostat	6.06%	7.37%	9.08%	8.62%	7.67%	6.30%	4.92%	3.96%	
RO	EB 358 unweighted	7.31%	6.72%	8.20%	10.67%	11.36%	6.23%	1.09%	0.10%	0.058
	EB 358 weighted	8.62%	9.16%	8.76%	8.07%	6.73%	8.79%	1.45%	0.14%	
	Eurostat	6.67%	7.94%	9.18%	7.19%	8.50%	5.87%	4.37%	2.86%	
SE	EB 358 unweighted	1.60%	2.30%	7.80%	8.60%	9.40%	13.20%	6.10%	1.60%	0.066
	EB 358 weighted	4.85%	3.84%	11.33%	8.60%	7.94%	7.91%	3.57%	0.94%	
	Eurostat	7.41%	7.25%	7.66%	7.71%	7.17%	6.40%	3.86%	3.85%	
SI	EB 358 unweighted	3.66%	4.85%	7.62%	13.65%	12.96%	12.66%	6.53%	0.99%	0.040
	EB 358 weighted	6.49%	7.84%	8.44%	8.96%	7.40%	7.72%	3.39%	0.53%	
	Eurostat	5.83%	7.82%	8.03%	8.46%	7.96%	5.63%	4.45%	3.64%	
SK	EB 358 unweighted	3.80%	7.80%	10.15%	10.73%	12.78%	8.88%	2.63%	0.10%	0.037
	EB 358 weighted	8.89%	8.95%	9.68%	8.29%	7.21%	6.81%	2.05%	0.06%	
	Eurostat	7.42%	9.26%	8.65%	7.98%	8.22%	5.23%	3.26%	2.42%	
UK	EB 358 unweighted	3.08%	4.87%	6.85%	11.72%	12.02%	10.33%	7.05%	2.78%	0.025
	EB 358 weighted	7.75%	7.43%	8.21%	9.76%	7.32%	5.82%	4.10%	1.49%	
	Eurostat	7.55%	8.08%	8.03%	8.48%	6.92%	5.75%	3.78%	3.48%	
EU 28	EB 358 unweighted	4.10%	5.57%	8.52%	11.21%	12.26%	10.90%	5.04%	0.91%	0.041
	EB 358 weighted	7.44%	7.37%	9.17%	9.15%	7.52%	7.50%	3.23%	0.52%	
	Eurostat	6.54%	7.60%	8.27%	8.47%	7.57%	5.91%	4.39%	3.82%	

Note: Country names corresponding to the country codes can be found in appendix.

2.4 Analysis of the sample structure of the EC survey on “Retailers’ attitudes towards cross-border trade and consumer protection”

Violeta Piculescu and Vincent Van Roy

In this chapter we first explore the necessity to include the microenterprises in the future waves of the EC survey of retailers that will support the EC Consumer Conditions Scoreboard, and continue with analyses of the structure of the sample of the EC survey of retailers about the structure of the population of SMEs and large enterprises in the EU single market.

2.4.1 Population data on micro enterprises in Europe

EC survey on “Retailers’ attitudes towards cross-border trade and consumer protection” (TNS 2013), which is the main data source for the EC Consumer Conditions Scoreboard from the retailers’ side, covers only firms with at least 10 employees. It has been argued, however, that the survey should cover also the micro firms (with less than 10 employees) since these represent a significant share of businesses in the EU single market.

In this chapter we explore this issue based on data on the population of enterprises in the EU extracted from the database on SMEs in Europe, available online from DG Enterprises and Industry. In the context of the SME Performance Review action, DG Enterprise and Industry of the European Commission collects annual data on the micro, small, medium, and large size enterprises across economic sectors in EU Member States (DG ENTR 2013a).⁵³ This database includes historical series for the period 2008-2010/ 2011, now-casts for 2011 and 2012,⁵⁴ and forecasts for 2013 and 2014. The now-casting and forecasting methodologies applied in this context are presented in the background report DG ENTR (2013b). The core indicators of interest for the analysis include the number of enterprises, the gross value added, and the number of employees by single-digit and double-digit industry levels for non-financial economic activities for each EU Member State, and they are based on data from Eurostat, national statistical agencies, and DIWecon estimates of historical data (DG ENTR 2013b).

⁵³ The database and background material are available online at:

http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/index_en.htm

⁵⁴ Now-casting is used to derive estimates for indicators for which actual data is published with a lag (DG ENTR 2013b).

With the view of the data relevant for comparisons with the structure of the EC retailers survey, we focus the analysis in this chapter on selected economic sectors which are most relevant for consumer issues, and for which data is available in both sources (the EC retailers survey and the database on European SMEs). These sectors include the following NACE 2 categories at two-digit industry level: ⁵⁵

Table 47 NACE 2 categories in EC survey and European SMEs data

NACE2-code	Sector classification
G45	Wholesale and retail trade and repair of motor vehicles and motorcycles
G47	Retail trade, except of motor vehicles and motorcycles
H50	Water transport
H51	Air transport
H52	Warehousing and support activities for transportation
H53	Postal and courier activities
I55	Accommodation
I56	Food and beverage service activities
J61	Telecommunications
J62	Computer programming, consultancy and related activities
L68	Real estate activities
N77	Rental and leasing activities
N95	Travel agency, tour operator reservation service and related activities

The NACE 2 sectors K64 and K65 related to financial services including insurances and S95 representing repair activities of computers, personal and household goods are sampled in the retailers' EC survey but are not covered in the population database of the European SMEs. For the ease of presentation and for the remainder of this chapter, we aggregated several sectors in broader categories, i.e. transport & postal services (H50-H53), restaurants & catering (I55, I56) and telecommunication (J61, J62). Eventually, eight (aggregated) sectors are represented in the analyses.

⁵⁵ NACE is the abbreviation for the Statistical Classification of Economic Activities in the European Union. NACE versions have been developed since 1970, with the most recent classification being NACE Revision 2 adopted in 2006. The reference year for NACE Rev 2 statistics is 2008. More details are provided by Eurostat at:

http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Statistical_classification_of_economic_activities_in_the_European_Community_%28NACE%29

The database on European SMEs includes data for the following categories of firms: 1) firms with less than 10 employees (micro enterprises), 2) firms with 10-49 employees (small enterprises), 3) firms with 50-249 employees (medium enterprises), and 4) firms with at least 250 employees (large and very large enterprises).

In order to explore the contribution of microenterprises to the EU Single Market, first we calculate, for each EU country, the proportions of these types of enterprises in the total number of firms active in the eight sectors combined. The results are included in Table 48, which reads as follows. In Austria, for example, the share of micro enterprises in the total number of firms in the eight sectors is 89.26%. The rest of the firms are small (9.55%), medium (1.01%), and large (0.17%). More generally, data in Table 48 indicates large proportions of micro enterprises in the selected sectors in all EU Member States, with a maximum of approximately 97% in Greece (based on data from 2009) and Poland (based on data for 2013), and a minimum of 86.68% in Ireland (based on data for 2013). The share of micro firms in EU-28 in 2013 is estimated around 95%.

Table 48 Share of number of European micro, small, medium and large enterprises in selected sectors, 2013

Country	Companies with 0-9 employees	Companies with 10-49 employees	Companies with 50-249 employees	Companies with more than 250 employees
AT	89.26%	9.55%	1.01%	0.17%
BE	94.78%	4.62%	0.50%	0.09%
BG	94.14%	5.17%	0.63%	0.06%
CY	94.54%	4.40%	0.89%	0.18%
CZ	96.27%	3.26%	0.39%	0.08%
DE*	.	.	.	.
DK	89.21%	9.25%	1.29%	0.25%
EE	89.29%	8.92%	1.54%	0.25%
EL	97.09%	2.66%	0.22%	0.03%
ES	95.90%	3.66%	0.38%	0.07%
FI	93.60%	5.53%	0.66%	0.20%
FR	95.44%	3.87%	0.57%	0.11%
HR	94.07%	5.01%	0.73%	0.18%
HU	95.58%	3.92%	0.42%	0.08%
IE	86.68%	11.27%	1.83%	0.21%
IT	96.13%	3.52%	0.30%	0.06%
LT	91.13%	7.71%	1.04%	0.12%
LU	89.14%	9.09%	1.38%	0.39%
LV	89.87%	8.52%	1.37%	0.23%
MT	95.22%	3.70%	0.98%	0.10%
NL	92.40%	6.47%	0.94%	0.18%
NO	92.56%	6.57%	0.69%	0.19%
PL	97.21%	2.21%	0.50%	0.08%
PT	96.03%	3.48%	0.43%	0.07%
RO	92.25%	6.86%	0.77%	0.11%
SE	95.13%	4.14%	0.61%	0.12%
SI	93.95%	5.13%	0.77%	0.15%
SK	95.76%	3.66%	0.47%	0.11%
UK	89.86%	8.69%	1.17%	0.29%
EU 28*	94.88%	4.46%	0.56%	0.11%

Note: Country names corresponding to the country codes can be found in appendix. Percentages represent the proportion of the given type of enterprise in the total number of enterprises in the selected sectors in the country. (*): EU-28 except Germany. Data for Germany not available at the two-digit industry level; latest data series for Greece are from 2009.

From the perspective of the employment in these enterprises the picture across the EU-28 is less homogeneous. In Table 49 we present the share of the number of persons employed in the selected sectors by type of company.

Table 49 Share of employment in selected sectors by type of company, 2013

Country	Companies with 0-9 employees	Companies with 10-49 employees	Companies with 50-249 employees	Companies with more than 250 employees
AT	31.97%	24.04%	13.07%	30.92%
BE	41.86%	21.25%	11.08%	25.81%
BG	46.20%	23.11%	13.92%	16.76%
CY	40.67%	18.02%	19.41%	21.90%
CZ	39.11%	18.87%	11.70%	30.32%
DE*	.	.	.	.
DK	.	.	.	.
EE	31.08%	23.85%	20.84%	24.22%
EL	64.04%	16.97%	6.96%	12.03%
ES	49.45%	17.05%	9.23%	24.28%
FI	29.54%	19.88%	12.25%	38.32%
FR	32.41%	16.89%	12.38%	38.33%
HR	37.45%	16.45%	13.98%	32.11%
HU	44.15%	17.97%	10.47%	27.41%
IE	27.49%	26.18%	19.44%	26.88%
IT	55.06%	16.46%	7.88%	20.60%
LT	30.01%	27.33%	17.61%	25.05%
LU	27.31%	26.43%	19.86%	26.40%
LV	30.88%	24.21%	17.25%	27.66%
MT	42.47%	19.53%	25.64%	12.37%
NL	42.47%	19.53%	25.64%	12.37%
NO	28.08%	24.94%	14.34%	32.64%
PL	50.21%	11.26%	11.95%	26.58%
PT	49.38%	18.58%	11.79%	20.24%
RO	37.03%	22.76%	13.27%	26.95%
SE	30.08%	20.83%	15.44%	33.65%
SI	35.51%	18.79%	14.91%	30.79%
SK	41.82%	15.70%	11.27%	31.21%
UK	18.11%	16.10%	11.09%	54.70%
EU 28*	38.46%	17.44%	11.25%	32.85%

Note: Country names corresponding to the country codes can be found in appendix. Percentages represent the proportion of the total number of persons employed in the selected sectors in the country. (*): EU-28 except Germany and Denmark. Data for Germany and Denmark on persons employed are not available at the two-digit industry level; latest data series for Greece are from 2009.

In Austria, for instance, the microenterprises in the eight selected sectors are estimated to employ 31.97% of all persons in all companies in the selected sectors in the country. Across EU Member States, employment in micro firms reaches a maximum of 64% in Greece (based on data from 2009) and a minimum of almost 18% in the UK (based on data from 2013). Large enterprises represent a maximum of 57.7% of the total employment in the selected sectors in the UK, and a minimum of 12% in the same sectors in Greece. Overall, at the EU-28 level, micro enterprises represent around 38% of employment in the eight sectors, and large enterprises represent almost 33% in these sectors.

Further, we also analyse the distribution of the gross value added by the eight selected sectors across the type of firms, by country.⁵⁶ The results are included in Table 50, which reads as follows. The gross value added by micro enterprises in the eight selected sectors in Austria amounts to 27.29% of the total gross value added in the eight sectors in the country.

More generally, the results in Table 50 indicate that, in many EU countries, the contribution of micro enterprises is often as high as (or even higher than) the contribution of large enterprises. The contribution in terms of gross value added of micro enterprises reaches its relative maximum in Greece (40.25%), and its minimum in Latvia (17.44%). Other countries with relatively larger gross value added shares of micro enterprises include, for example, Italy, Spain, Luxembourg, Malta, Norway and Slovakia (all with shares of at least 30%). The large enterprises, on the other hand, have a maximum total contribution to the eight selected sectors in the UK (55.55%), and the lowest in Malta (19.83%). At the EU-28 level, the share of micro enterprises to the gross value added in the selected sectors of the Single Market is 27.21%, and the corresponding share of the large enterprises is 43.11%.

In conclusion, the analysis in this chapter indicates that micro enterprises have a significant contribution to the EU Single Market. This contribution is reflected in the distribution of employment and the distribution of gross value added across eight categories of economic activities which are relevant for consumer conditions. The analysis also helps to observe the

⁵⁶ The gross value added is defined as the difference between output and intermediate consumption (DG ENTR 2013).

degree of heterogeneity among EU Member States with respect to economic reliance on micro enterprises, relative to larger ones. In the UK, for instance, although the micro enterprises represent close to 90% of enterprises active in the eight selected sectors, when compared with other EU countries, their contributions to employment and gross value added are relatively modest (18.11% and 19.14%, respectively). In Italy, on other hand, the microenterprises are estimated to represent 96% of the enterprises active in the eight sectors in the country in 2013, and their contributions to employment and gross value added are 55.06% and 33.92%, respectively. These differences are obviously driven by the heterogeneity of social/political and economic factors in the EU Member States. Given the non-negligible contribution of micro-enterprises to economies and the fact that they may use radically different approaches to consumer markets than larger counterparts (e.g. they may be better able to adjust products and services to clients' need, or may be more reluctant to follow consumer legislations etc.), we recommend to include micro enterprises in the sectors of interest for all EU Member States in future waves of the EC retailers' survey.⁵⁷ In order to ensure comparability with previous waves in which micro-enterprises are not included, this group of firms needs to be treated separately when calculating the weights and processing the results.

⁵⁷ One condition that may hamper the sample design and selection of micro-enterprises is the lack of population data for Denmark and Germany.

Table 50 Proportion of gross value by type of enterprise, 2013

Country	Companies with 0-9 employees	Companies with 10-49 employees	Companies with 50-249 employees	Companies with more than 250 employees
AT	27.29%	20.82%	17.69%	34.20%
BE	27.88%	21.50%	17.16%	33.46%
BG	22.89%	21.03%	21.42%	34.66%
CY	29.21%	17.76%	20.38%	32.65%
CZ	27.89%	14.26%	13.95%	43.90%
DE*	.	.	.	.
DK	26.67%	17.87%	15.52%	39.94%
EE	24.74%	21.08%	26.87%	27.31%
EL	40.25%	20.99%	11.18%	27.58%
ES	34.24%	16.32%	11.42%	38.03%
FI	28.49%	19.59%	13.21%	38.71%
FR	28.62%	13.88%	11.97%	45.54%
HR	20.05%	15.97%	17.65%	46.33%
HU	29.44%	18.74%	14.91%	36.91%
IE	19.47%	21.52%	17.93%	41.08%
IT	33.92%	17.19%	10.07%	38.82%
LT	17.44%	23.72%	21.18%	37.66%
LU	32.99%	15.05%	20.72%	31.25%
LV	21.69%	21.16%	20.82%	36.33%
MT	35.52%	19.10%	25.55%	19.83%
NL	23.20%	19.24%	18.34%	39.22%
NO	40.23%	17.26%	14.11%	28.40%
PL	22.42%	14.38%	18.05%	45.15%
PT	27.03%	20.61%	17.42%	34.95%
RO	19.42%	20.51%	16.86%	43.21%
SE	30.59%	17.73%	16.05%	35.63%
SI	22.43%	18.08%	19.21%	40.28%
SK	35.26%	15.16%	14.48%	35.10%
UK	19.14%	12.86%	12.45%	55.55%
EU 28*	27.21%	16.16%	13.52%	43.11%

Note: Country names corresponding to the country codes can be found in appendix. Percentages represent the proportion of the gross value added by the given type of companies (micro, small, medium, or large) in the selected sectors.

(*): EU 28 except Germany. Data for Germany is not available at the two-digit industry level; latest data series for Greece are from 2009.

2.4.2 Comparison of the sample structure of the EC retailers survey and population data with respect to the distribution of firms across selected sectors

In this chapter we continue the analysis for the same eight selected economic sectors in order to illustrate the possibility to compare the structure of the survey sample with estimates for the population of European small, medium and large enterprises. The estimates for the population data used in the chapter are extracted from the same database of DG ENTR described above. The

analysis covers enterprises with at least 10 employees, and it does not include the micro enterprises since, by design, these are not included in the EC retailers survey.

Following the same methodology as in previous chapter, we only take into account firms in the EC retailers' survey for which sector information is also available in the European SMEs database (Table 47). In addition, we exclude firms for which the firm size in terms of employment is unknown. This selection results in a reduced sample of 10293 observations (93.57% of the initial sample). The frequencies of observations across these ten categories in the reduced sample are included in Table 51. Table 51 includes the non-weighted and weighted frequencies of retailers in the reduced sample by NACE 2 category. The weighted frequencies are calculated by weighting the data with the weights $w1$ provided in the EC retailers' dataset. The series $w1$ of weights should, in principle, help reflect the representativity of the firms included in the sample with respect to the population of firms with similar characteristics in the country. Data covers the EU-28, Norway and Iceland.

The non-weighted frequencies illustrated in Table 51 indicate that a majority of the reduced sample is represented by firms in the retail trade (32.42%) and restaurants and catering (26.69%). A proportion of 14.94% of retailers in the sample are active in transport and services, and almost 13% of them in the category of car sales and repair. The rest of approximately 13% are distributed across the remaining 4 categories.

Although we did not apply any statistical test for the differences between the weighted and unweighted frequencies, a simple direct comparison suggests a high probability of no significant differences between them for four of the 8 NACE 2 groups. The use of the survey weights produces only slight differences with a maximum difference of 1.04 percentage points for the sector of restaurants and catering.

Table 51 Frequency of retailers by selected NACE 2 category in EC survey

Number of firms by sector		Frequency	Percent	Cumulative Frequency	Cumulative Percent
Car sales & repair	unweighted	1289	12.52	1,289	12.52
	weighted	1294	12.44	1294	12.44
Retail sales	unweighted	3337	32.42	4626	44.94
	weighted	3300	31.71	4594	44.15
Transport & postal service	unweighted	1538	14.94	6,164	59.89
	weighted	1521	14.62	6115	58.76
Restaurants & catering	unweighted	2747	26.69	8911	86.57
	weighted	2886	27.73	9000	86.49
Telecommunication	unweighted	567	5.51	9,478	92.08
	weighted	587	5.65	9588	92.14
Real estate	unweighted	515	5.00	9993	97.09
	weighted	523	5.03	10111	97.17
Renting & leasing	unweighted	147	1.43	10,140	98.51
	weighted	146	1.40	10257	98.57
Travel agencies	unweighted	153	1.49	10293	100.00
	weighted	149	1.43	10406	100.00

Next, we look at the distribution of the eight types of economic activities in terms of the number of enterprises active in the sector in each country of analysis. The results are included in Table 52. For each country, we calculate the share of each economic sector in the total number of enterprises in the eight sectors based on survey and population data. For the survey data, we calculated both the unweighted and weighted shares. The survey weights used are the same as above.

Data in Table 52 allows us to compare the structure of the sample of the EC retailers' survey with the population data on firms in EU countries. The table reads as follows. For Austria, for example, we find that the economic activities included in the NACE category of car sales and repair represent 11.02% of the total unweighted number of firms included in this category in the survey, or 9.14% of the weighted number of firms included in this category in the survey. When calculated based on the data on the population of firms in the car sales and repair category in Austria, the share amounts to 10.52%. For Austria, based on the weighted data, the categories of firms that appear to have been (slightly) oversampled are mainly retail sales and restaurants and

catering, while the categories of telecommunication, real estate and rent and leasing appear (slightly) under-sampled.

Table 52 Comparison of the sample structure with the population data for selected sectors

Country	Source	Car sales & repair	Retail sales	Transport & postal service	Restaurants & catering	Telecom.	Real estate	Rent & leasing	Travel agencies	Diff
AT	EB 359 unweighted	11.02%	33.07%	15.75%	33.07%	2.62%	2.89%	0.52%	1.05%	0.048
	EB 359 weighted	9.14%	29.43%	16.84%	37.71%	2.88%	2.53%	0.49%	0.98%	
	Population (2013)	10.52%	26.01%	17.61%	35.47%	4.07%	3.71%	1.19%	1.40%	
BE	EB 359 unweighted	18.93%	27.73%	17.87%	22.93%	6.13%	2.40%	1.33%	2.67%	0.077
	EB 359 weighted	17.91%	26.94%	17.90%	24.87%	6.48%	2.06%	1.23%	2.62%	
	Population (2013)	12.46%	28.94%	22.17%	23.19%	7.33%	3.05%	1.79%	1.07%	
BG	EB 359 unweighted	8.81%	36.53%	16.06%	25.13%	5.18%	6.74%	0.52%	1.04%	0.021
	EB 359 weighted	9.06%	38.12%	15.42%	24.80%	4.67%	6.66%	0.57%	0.71%	
	Population (2013)	7.54%	38.96%	15.58%	25.17%	5.13%	5.89%	0.39%	1.33%	
CY	EB 359 unweighted	6.57%	45.26%	11.68%	29.93%	4.38%	2.19%	0.00%	0.00%	0.042
	EB 359 weighted	4.66%	34.45%	15.15%	37.40%	5.70%	2.64%	0.00%	0.00%	
	Population (2013)	6.56%	34.33%	14.95%	36.66%	3.12%	1.47%	0.59%	2.32%	
CZ	EB 359 unweighted	14.83%	24.30%	14.32%	27.62%	11.25%	5.37%	1.28%	1.02%	0.120
	EB 359 weighted	15.98%	26.26%	12.74%	27.41%	9.97%	5.33%	1.23%	1.09%	
	Population (2013)	10.62%	30.28%	20.46%	21.94%	7.15%	6.88%	1.20%	1.46%	
DE	EB 359 unweighted	11.54%	33.52%	14.56%	26.10%	6.59%	4.67%	1.65%	1.37%	n.a.
	EB 359 weighted	11.09%	32.16%	16.19%	27.11%	6.97%	3.89%	1.36%	1.23%	
	Population (2013)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	
DK	EB 359 unweighted	23.13%	27.05%	13.17%	12.10%	11.39%	6.76%	4.27%	2.14%	0.214
	EB 359 weighted	24.55%	26.38%	11.81%	12.60%	12.25%	6.49%	4.11%	1.82%	
	Population (2013)	10.18%	34.47%	17.37%	23.24%	6.44%	6.11%	1.21%	0.99%	
EE	EB 359 unweighted	8.35%	31.90%	18.73%	28.86%	4.30%	4.81%	1.77%	1.27%	0.162
	EB 359 weighted	7.89%	29.36%	19.44%	30.48%	4.18%	5.38%	1.81%	1.45%	
	Population (2013)	9.20%	25.22%	29.51%	19.01%	5.04%	8.52%	1.51%	1.99%	
EL	EB 359 unweighted	12.18%	22.28%	13.73%	34.46%	7.77%	1.81%	2.85%	4.92%	0.107
	EB 359 weighted	18.80%	31.28%	10.60%	26.24%	5.73%	1.47%	2.09%	3.79%	
	Population (2013)	12.48%	34.64%	14.03%	32.35%	2.37%	0.40%	0.86%	2.88%	
ES	EB 359 unweighted	17.32%	23.62%	17.59%	28.87%	8.40%	2.10%	1.31%	0.79%	0.079
	EB 359 weighted	15.44%	22.54%	17.66%	30.15%	9.32%	2.71%	1.43%	0.76%	
	Population (2013)	11.10%	25.20%	19.80%	33.04%	4.51%	2.75%	2.38%	1.21%	
FI	EB 359 unweighted	12.47%	34.22%	17.51%	25.20%	3.71%	4.77%	1.06%	1.06%	0.154
	EB 359 weighted	10.81%	30.18%	19.20%	28.06%	3.90%	5.46%	1.23%	1.16%	
	Population (2013)	8.04%	31.74%	22.66%	15.77%	11.51%	7.81%	1.20%	1.28%	
FR	EB 359 unweighted	9.30%	35.40%	11.37%	34.37%	1.55%	4.91%	1.81%	1.29%	0.176
	EB 359 weighted	8.83%	33.10%	10.87%	38.02%	1.46%	4.45%	1.68%	1.59%	
	Population (2009)	11.65%	27.05%	21.00%	26.17%	6.22%	4.92%	1.80%	1.19%	
HR	EB 359 unweighted	10.91%	30.65%	17.92%	25.71%	7.01%	2.86%	1.30%	3.64%	0.052
	EB 359 weighted	11.29%	31.02%	16.62%	25.34%	7.03%	3.24%	1.47%	3.99%	
	Population (2013)	9.69%	34.28%	14.93%	27.91%	6.36%	3.51%	1.28%	2.05%	
HU	EB 359 unweighted	10.47%	41.62%	7.59%	17.80%	7.07%	13.87%	0.79%	0.79%	0.129
	EB 359 weighted	9.92%	37.47%	7.85%	19.86%	7.58%	15.48%	0.86%	0.97%	
	Population (2013)	11.62%	33.02%	17.50%	20.82%	6.27%	8.58%	1.32%	0.86%	

Table 51 Comparison of the sample structure with the population data for selected sectors (cont.)

Country	Source	Car sales & repair	Retail sales	Transport & postal service	Restaurants & catering	Telecom.	Real estate	Rent & leasing	Travel agencies	Diff
IE	EB 359 unweighted	7.01%	41.82%	6.49%	40.78%	2.34%	1.30%	0.26%	0.00%	0.098
	EB 359 weighted	7.01%	39.14%	7.06%	42.52%	2.95%	0.99%	0.33%	0.00%	
	Population (2013)	7.43%	37.00%	9.77%	34.26%	5.69%	2.77%	2.20%	0.88%	
IT	EB 359 unweighted	19.19%	25.68%	16.22%	26.76%	7.57%	3.24%	0.54%	0.81%	0.113
	EB 359 weighted	16.95%	21.27%	16.01%	30.94%	10.17%	3.85%	0.22%	0.58%	
	Population (2013)	10.66%	25.12%	21.31%	34.31%	5.12%	1.28%	1.05%	1.15%	
LT	EB 359 unweighted	16.15%	28.21%	29.23%	17.18%	2.82%	4.87%	1.28%	0.26%	0.060
	EB 359 weighted	17.82%	29.13%	26.54%	17.54%	2.71%	4.83%	1.15%	0.28%	
	Population (2013)	13.75%	27.75%	28.82%	15.98%	4.87%	6.92%	0.87%	1.04%	
LU	EB 359 unweighted	15.49%	38.03%	8.45%	26.06%	1.41%	7.75%	2.82%	0.00%	0.193
	EB 359 weighted	9.30%	23.46%	12.16%	37.53%	2.00%	11.55%	4.00%	0.00%	
	Population (2013)	9.58%	24.91%	16.95%	29.22%	15.16%	1.61%	1.94%	0.63%	
LV	EB 359 unweighted	13.64%	34.60%	17.93%	16.41%	3.79%	10.86%	1.52%	1.26%	0.063
	EB 359 weighted	12.98%	32.45%	18.76%	17.39%	3.99%	11.56%	1.49%	1.38%	
	Population (2013)	8.42%	33.33%	22.87%	17.17%	3.80%	12.41%	1.10%	0.90%	
MT	EB 359 unweighted	8.46%	40.00%	13.85%	29.23%	2.31%	1.54%	0.77%	3.85%	0.192
	EB 359 weighted	10.16%	46.51%	11.30%	25.08%	1.70%	1.07%	0.74%	3.43%	
	Population (2013)	5.64%	30.98%	14.87%	33.39%	5.65%	1.43%	3.21%	4.82%	
NL	EB 359 unweighted	14.19%	34.80%	8.78%	27.70%	5.74%	4.73%	2.70%	1.35%	0.180
	EB 359 weighted	12.99%	32.49%	9.37%	31.01%	6.08%	4.09%	2.79%	1.19%	
	Population (2013)	11.35%	27.41%	21.71%	20.09%	10.63%	5.21%	2.18%	1.41%	
NO	EB 359 unweighted	18.03%	37.16%	8.74%	30.60%	0.82%	2.19%	0.82%	1.64%	0.157
	EB 359 weighted	17.25%	35.81%	9.26%	32.02%	0.87%	2.21%	0.87%	1.71%	
	Population (2013)	10.28%	40.33%	16.09%	22.23%	6.65%	1.95%	1.36%	1.10%	
PL	EB 359 unweighted	9.76%	39.84%	14.36%	19.78%	4.61%	9.49%	0.81%	1.36%	0.092
	EB 359 weighted	11.20%	46.97%	11.54%	16.83%	3.96%	7.74%	0.71%	1.04%	
	Population (2013)	11.36%	43.05%	17.80%	11.88%	4.59%	10.00%	0.67%	0.66%	
PT	EB 359 unweighted	15.05%	29.34%	13.52%	33.93%	3.32%	2.04%	1.28%	1.53%	0.057
	EB 359 weighted	15.20%	29.28%	13.49%	34.08%	3.63%	1.78%	1.03%	1.50%	
	Population (2013)	11.72%	31.79%	15.15%	31.10%	4.37%	3.09%	1.36%	1.42%	
RO	EB 359 unweighted	10.91%	41.12%	14.21%	23.10%	5.33%	2.54%	0.76%	2.03%	0.075
	EB 359 weighted	12.09%	45.39%	12.68%	20.39%	4.71%	2.27%	0.65%	1.82%	
	Population (2013)	10.85%	44.05%	18.35%	16.33%	4.70%	4.16%	0.62%	0.94%	
SE	EB 359 unweighted	11.51%	29.86%	16.71%	22.19%	2.74%	12.88%	2.74%	1.37%	0.133
	EB 359 weighted	9.36%	28.20%	16.68%	24.90%	3.24%	13.21%	2.89%	1.53%	
	Population (2013)	8.85%	26.45%	23.16%	19.65%	11.54%	7.51%	1.67%	1.16%	
SI	EB 359 unweighted	10.16%	21.93%	33.16%	17.91%	11.50%	4.28%	0.80%	0.27%	0.082
	EB 359 weighted	11.70%	24.10%	31.37%	17.04%	11.10%	3.60%	0.81%	0.27%	
	Population (2013)	12.50%	21.98%	26.72%	23.15%	9.92%	3.83%	0.57%	1.32%	
SK	EB 359 unweighted	10.44%	39.16%	11.23%	21.41%	6.79%	6.79%	1.83%	2.35%	0.063
	EB 359 weighted	10.78%	39.74%	11.04%	21.19%	6.57%	6.57%	1.74%	2.35%	
	Population (2013)	8.69%	44.15%	10.57%	20.81%	3.76%	7.85%	3.54%	0.64%	
UK	EB 359 unweighted	7.77%	28.82%	6.02%	44.61%	6.77%	3.51%	2.51%	0.00%	0.168
	EB 359 weighted	6.31%	25.12%	5.32%	49.41%	7.66%	3.57%	2.62%	0.00%	
	Population (2013)	9.16%	23.14%	12.15%	35.08%	8.56%	7.54%	2.98%	1.39%	

Note: Country names corresponding to the country codes can be found in appendix.

Although we did not apply any systematic statistical test, in the last column of Table 52 we report a simple measure of the differences between the sample structure and the population proportions, measure calculated as follows:

$$Diff = \sqrt{\sum_{i=Sectors} (EurostatProportion_i - EBWeightedProportion_i)^2}$$

Higher values of the measure DIFF indicate more unbalanced samples.

The differences calculated in Table 52 indicate that there are several cases with large discrepancies between the structure of the eight sectors as reflected by estimated population data and the sample structure of the EC retailers' survey. In Cyprus, for example, we could not identify any company from the sectors of rent and leasing and travel agencies. In contrast, based on the data from the SMEs database, the proportions of these sectors in the total number of firms for all the eight selected sectors in the Cypriot economy are: 0.59%, and 2.32%.

Another case with apparent large discrepancies between the sample structure and the population structure of the eight sectors is identified with Denmark. In Denmark, firms in the category car sales and repair are estimated to represent 10.18% of firms across the six selected sectors of the Danish economy. In the sample of the EC retailers' survey, the Danish firms in this category are largely oversampled with a percentage of 24.55%. In revenge, most sectors such as transport and postal services, restaurants and catering, and telecommunications seem to be mainly under-sampled. Similar situations can be identified for other EU Member States, such as Estonia, France, Luxembourg, Malta, Netherlands and UK.⁵⁸

In conclusion, the analysis with respect to the number of enterprises in the eight selected sectors at the country level reveals that both unweighted and weighted shares of the sectors in the survey differ from the respective shares calculated based on the estimates of the economic structure of each country as reflected by the European SMEs database. Therefore, for future waves of the

⁵⁸ Large discrepancies are also noticeable with Greece, but in this case some of them could be due to the fact that the population data refer to the economic structure in 2009, while the survey data was collected in 2012.

survey, we recommend a sample design that helps strike a more balanced sample that is representative for the economic structure at national levels.⁵⁹

2.4.3 Comparison of the sample structure of the EC retailers survey and population data with respect to the distribution of types of firms across selected sectors

In this chapter we analyse the sample of the EC retailers survey with respect to the prevalence of firms grouped in three categories: 1) small (with 10-49 employees, 2) medium (with 50-249 employees), and 3) large (with more than 250 employees). The proportions of these types of firms in the full sample of the EC retailers' survey are presented in Table 53 (with and without applying the survey weights).

In the reduced sample of the EC survey for retailers, based on the weighted frequencies, the small firms represent 74% of the sample, the medium firms approximately 20%, and the large firms 6%. These results indicate that the weighting procedure does generate significant differences in the shares calculated based on types of firms.

Table 53 Sample composition by type of retailer in the EC retailers survey (reduced sample of eight sectors)

Number of firms by employment size		Frequency	Percent	Cumulative Frequency	Cumulative Percent
Firms with 10-49 employees	unweighted	7624	74.07	7624	74.07
	weighted	8359	80.33	8359	80.33
Firms with 50-249 employees	unweighted	2052	19.94	9676	94.01
	weighted	1626	15.62	9985	95.95
Firms with at least 250 employees	unweighted	617	5.99	10293	100.00
	weighted	421	4.05	10406	100.00

Further, in order to compare the structure of the EC retailers survey in terms of the types of firms included in the survey with the distribution of these firms in the eight economic sectors in each country, we use the data on the sub-population of small, medium and large enterprises from the SMEs databases. On this basis, we calculate the percent of firms of each type (small, medium,

⁵⁹ For a detailed presentation of issues of design and implementation of business surveys see Eurostat (1997).

large) in the total number of firms active in the eight sectors in each country. In the SMEs database the latest data series available for Greece are from 2009, while for Germany data is not available at the two-digit industry level.

The results calculated based on the survey (weighted and non-weighted) data and the estimates for the population of enterprises are included in Table 54, and they read as follows. In Austria, for instance, the small companies with 10-49 employees are estimated to represent 89.00% of the total number of firms active in 2013 in the eight selected sectors in the country. In the Austria sample of the EC retailers survey, 74.25% of small firms are active in the eight selected sectors. When applying the weighting procedures, we learn that these observations represent 85.99% of the small firms which are active in the eight sectors in Austria. The differences reported in the last column of the table are calculated based on a similar formula as above.

Table 54 Comparison of sample composition with population data by type of firms for selected sectors

Country	Source	Firms with 10-49 employees	Firms with 50-249 employees	Firms with at least 250 employees	Diff
AT	EB 359 unweighted	74.25%	18.50%	7.25%	0.039
	EB 359 weighted	85.99%	10.14%	3.86%	
	Population (2013)	89.00%	9.44%	1.56%	
BE	EB 359 unweighted	70.57%	19.95%	9.48%	0.142
	EB 359 weighted	77.07%	16.00%	6.93%	
	Population (2013)	88.60%	9.62%	1.77%	
BG	EB 359 unweighted	71.03%	25.19%	3.78%	0.151
	EB 359 weighted	76.48%	20.10%	3.42%	
	Population (2013)	88.16%	10.81%	1.03%	
CY	EB 359 unweighted	73.29%	19.86%	6.85%	0.076
	EB 359 weighted	74.27%	19.00%	6.73%	
	Population (2013)	80.48%	16.30%	3.22%	
CZ	EB 359 unweighted	75.75%	20.00%	4.25%	0.058
	EB 359 weighted	83.04%	14.13%	2.83%	
	Population (2013)	87.47%	10.37%	2.17%	
DE	EB 359 unweighted	64.50%	24.75%	10.75%	n.a.
	EB 359 weighted	74.64%	18.97%	6.39%	
	Population (2013)	.	.	.	
DK	EB 359 unweighted	57.25%	28.50%	14.25%	0.243
	EB 359 weighted	66.60%	26.08%	7.32%	
	Population (2013)	85.76%	11.96%	2.28%	
EE	EB 359 unweighted	71.25%	23.00%	5.75%	0.053
	EB 359 weighted	79.11%	17.41%	3.48%	
	Population (2013)	83.33%	14.34%	2.33%	
EL	EB 359 unweighted	71.25%	23.50%	5.25%	0.109
	EB 359 weighted	83.26%	14.50%	2.24%	
	Population (2013)	91.51%	7.47%	1.01%	
ES	EB 359 unweighted	63.25%	27.00%	9.75%	0.162
	EB 359 weighted	76.25%	17.93%	5.82%	
	Population (2013)	89.20%	9.19%	1.62%	
FI	EB 359 unweighted	75.37%	16.92%	7.71%	0.095
	EB 359 weighted	78.98%	15.79%	5.23%	
	Population (2013)	86.45%	10.36%	3.19%	
FR	EB 359 unweighted	73.13%	20.90%	5.97%	0.058
	EB 359 weighted	80.40%	16.20%	3.40%	
	Population (2009)	84.89%	12.59%	2.51%	
HR	EB 359 unweighted	72.50%	21.25%	6.25%	0.054
	EB 359 weighted	80.37%	15.80%	3.84%	
	Population (2013)	84.54%	12.38%	3.08%	
HU	EB 359 unweighted	87.50%	8.75%	3.75%	0.021
	EB 359 weighted	86.94%	10.91%	2.14%	
	Population (2013)	88.60%	9.60%	1.80%	

Table 53 Comparison of sample composition with population data by type of firms for selected sectors (cont.)

Country	Source	Firms with 10-49 employees	Firms with 50-249 employees	Firms with at least 250 employees	Diff
IE	EB 359 unweighted	63.00%	29.25%	7.75%	0.186
	EB 359 weighted	69.67%	23.27%	7.06%	
	Population (2013)	84.65%	13.77%	1.58%	
IT	EB 359 unweighted	68.25%	21.75%	10.00%	0.094
	EB 359 weighted	83.26%	12.10%	4.64%	
	Population (2013)	90.86%	7.68%	1.45%	
LT	EB 359 unweighted	77.06%	18.95%	3.99%	0.024
	EB 359 weighted	85.07%	13.19%	1.74%	
	Population (2013)	86.90%	11.70%	1.40%	
LU	EB 359 unweighted	76.82%	17.88%	5.30%	0.116
	EB 359 weighted	76.16%	21.45%	2.39%	
	Population (2013)	83.72%	12.73%	3.55%	
LV	EB 359 unweighted	79.55%	16.96%	3.49%	0.027
	EB 359 weighted	81.94%	14.93%	3.13%	
	Population (2013)	84.15%	13.56%	2.30%	
MT	EB 359 unweighted	67.33%	24.00%	8.67%	0.039
	EB 359 weighted	75.47%	19.28%	5.25%	
	Population (2013)	77.44%	20.45%	2.12%	
NL	EB 359 unweighted	59.00%	28.75%	12.25%	0.181
	EB 359 weighted	70.97%	23.24%	5.79%	
	Population (2013)	85.15%	12.42%	2.43%	
NO	EB 359 unweighted	85.28%	11.42%	3.30%	0.032
	EB 359 weighted	85.64%	10.87%	3.49%	
	Population (2013)	88.24%	9.26%	2.50%	
PL	EB 359 unweighted	70.75%	26.75%	2.50%	0.069
	EB 359 weighted	74.56%	22.94%	2.50%	
	Population (2013)	79.12%	17.85%	3.02%	
PT	EB 359 unweighted	75.75%	19.50%	4.75%	0.030
	EB 359 weighted	85.16%	11.94%	2.90%	
	Population (2013)	87.59%	10.77%	1.64%	
RO	EB 359 unweighted	84.79%	13.47%	1.75%	0.041
	EB 359 weighted	85.31%	12.31%	2.38%	
	Population (2013)	88.55%	9.98%	1.47%	
SE	EB 359 unweighted	65.00%	26.50%	8.50%	0.102
	EB 359 weighted	77.27%	19.07%	3.65%	
	Population (2013)	84.97%	12.52%	2.51%	
SI	EB 359 unweighted	76.56%	15.96%	7.48%	0.030
	EB 359 weighted	82.38%	13.72%	3.89%	
	Population (2013)	84.84%	12.66%	2.50%	
SK	EB 359 unweighted	89.50%	9.00%	1.50%	0.015
	EB 359 weighted	87.60%	10.33%	2.07%	
	Population (2013)	86.39%	11.01%	2.60%	
UK	EB 359 unweighted	54.50%	21.00%	24.50%	0.271
	EB 359 weighted	64.40%	16.65%	18.95%	
	Population (2013)	85.62%	11.55%	2.83%	

Note: Country names corresponding to the country codes can be found in appendix.

In general, relative to the previous exercise of comparing the survey data with estimated population data with respect to the shares of economic sectors, the analysis based on the shares of types of firms reveals a more balanced survey structure. Countries with sample structures similar to the estimated distribution of firms in the economy, for instance, include Latvia, Lithuania and Hungary. Under- or over-sampling of specific types of firms, however, is still present with the remaining countries. In Bulgaria, for instance, the under-sampling of small firms seems to be compensated by over-sampling of medium and large firms. In the Netherlands, the under-sampling of small firms is compensated primarily by an oversampling of medium firms, while in the UK the under-sampling of small firms is compensated by over-sampling the large ones. Overall, we note a tendency of under-sampling of the first category of small firms in several countries, though not in all.

2.4.4 Conclusions

The EC survey on “Retailers’ attitudes towards cross-border trade and consumer protection” is the main source of survey data from the supply side of the market for the EC Consumer Conditions Scoreboard. Carried out in 2013, the survey covers firms with at least 10 employees from economic sectors relevant for the analysis of consumer issues in the EU Single Market.

In this chapter we focus on issues of sample design related to the EC surveys that are to support the analysis in the EC Consumer Conditions Scoreboard. More specifically, we address the following aspects: 1) the relevance of including microenterprises in future sample designs of EC surveys of retailers, and 2) the sample structure of the EC retailers survey with respect to the relevant economic sectors and the number of small, medium and large firms in these sectors.

With respect to the inclusion of microenterprises in the sample of the EC survey of retailers, we use data on European Enterprises now casted for DG Enterprise and Industry for year 2013. On this basis, by analysing the share of micro enterprises in the total number of enterprises, employment, and gross value added in eight economic sectors of high relevance for the analysis of consumer issues, we learn that these firms bring in a significant contribution to the Single Market. As a result, we recommend the inclusion of these types of firms in the survey samples of future waves of the EC survey of retailers. In order to ensure comparability with previous waves

in which micro-enterprises are not included, this group of firms needs to be treated separately when calculating the weights and processing the results.

The remaining of the chapter focuses on the sample structure of the EC retailers survey. More specifically, we are interested to learn the extent to which the categories of firms included in the survey sample are representative for the population of similar firms in each EU Member States. For this purpose we select eight economic sectors available in population data and covered by the EC survey as well and compare the sample structure for these sectors with estimates of population data for the same sectors in each country for year 2013. We learn that larger discrepancies between the structure of the survey sample and the corresponding population data are likely to be found when analysing the percentages of the number of firms active in each of the eight sectors. In contrast, the analysis with respect to the type of firms (small, medium, large) indicates a relatively more balanced survey sample. In this context we also noted the lack of adequate documentation publicly available for the survey weights that can be used to correct for the under-sampling or over-sampling of specific categories of firms. The limitations concern the interviewing method, the sampling design, and the target population previously discussed in chapter 1.4.3.2.4. In a nutshell, the limitations are: 1) the CATI interviewing method does not allow for reflection on the answers, 2) the method does not correct of non-response biases, 3) questions may be more applicable to particular sub-samples of the survey. In addition to that, the respondent of the survey may not provide the company's view but his own knowledge and perceptions. Hence his answers may not reflect the view of the company itself but may be influenced by personal knowledge and perceptions. Most of the shortcomings of this survey are not easily solved, therefore discontinuing the survey should be considered carefully. The loss of information on consumer conditions about retailers could partially be compensated by 1) expanding the scope of existing studies on online sweeps and mystery shopping, 2) putting additional resources in building an EU-wide database on consumer complaints that can be analysed from the retailer perspective.

2.5 Development of the 10th edition of the consumer conditions index

Fiammetta Rossetti and Vincent Van Roy

This chapter presents the development steps and the audit exercise on the 10th edition of the Consumer Condition Index. This edition is extensively revised to fit into the updated framework on consumer conditions in the European Union that was presented in chapter 1.5.

2.5.1 Introduction

In this chapter we provide an overview of the construction of the 10th edition of the consumer conditions index (further denoted in this chapter as CCI) along with an assessment of its robustness across various modelling choices. The different indicators that feed into the index are in line with the conceptual framework presented in paragraph 1.5. Hence, the index is structured along the pillars of: 1) knowledge, awareness and trust, 2) compliance and enforcement, and 3) complaints and resolution of problems. All indicators are selected as to provide a comprehensive overview of consumer conditions in each country for domestic transactions. In addition, each pillar preserves as much as possible the symmetry between the consumers and retailers perspective. The data to construct the indicators stem from the EC consumer and retailer surveys conducted in 2014 (see appendix to chapter 1.5). All indicators have been calculated using weighted survey data as to obtain reliable country and EU-28 population estimations. The CCI includes all the Member States of the European Union, Norway and Iceland. In the remainder of this chapter we present the development steps and the statistical audit of the consumer conditions index.

2.5.2 Statistical coherence of the CCI framework

Appraising the coherence of an index implies four main steps: 1. the theoretical consideration of the conceptual framework of the index with respect to the existing literature; 2. the empirical checks of data (i.e. availability of indicators/variables, missing values, existence of outliers); 3. the assessment of the statistical coherence found in the data (i.e. correlation-based analyses and robustness checks about data imputation, weighting and aggregation methods); 4. the qualitative confrontation with expert bodies in order to get suggestions and reviews on the previous three steps. In this chapter we focus on the first three steps. We remain rather brief on the technical

issues in the statistical audit of a composite indicator since they were extensively addressed in chapter 1.3.

2.5.2.1 Step 1: Consistency of the framework

The first pillar about knowledge, awareness and trust contains indicators on the knowledge of consumers' and retailers' about consumers' rights, consumers' trust in organisations and in redress mechanisms along with the consumers' and retailers' viewpoint on perception of product safety, and accuracy of environmental claims, and online shopping/selling. We refer to Box 17 for a more detailed description of the indicators' construction.

Box 17: Country indicators for the pillar on knowledge, awareness and trust

Consumers' knowledge about consumer rights: percentage of average correct answers per country to three questions: on cooling-off period (Q6), faulty product guarantee (Q7): and unsolicited products (Q8).

Consumers' trust in organisations: average trust levels per country across three institutions: public authorities (Q3.1), retailers and service providers (Q3.2) and NGOs (Q3.3).

Consumers' trust in redress mechanisms: average agreement rates with questions Q3.4 and Q3.5.

Product safety from consumers' perspective: consumers who think that essentially all non-food products are safe + consumers who think that a small number of products are unsafe (as percentage of all consumers). Based on question Q4.

Accuracy of environmental claims from consumers' perspective: percentage of consumers agreeing that most environmental claims about goods or services are reliable (Q3.6).

Consumers' confidence in online shopping: percentage of consumers agreeing on feeling confident purchasing goods or services via the Internet from retailers or service providers in their own country (Q17.1).

Retailers' knowledge of consumer rights: percentage of average correct answers per country to five questions: on faulty product guarantee (Q5), seeking payment in marketing material (Q6.1), insufficient quantity of discounted products (Q6.2), promoting products for children (Q6.3) and premium rate phone number (Q6.4).

Product safety from retailers' perspective: retailers who think that essentially all non-food products are safe + retailers who think that a small number of products are unsafe (as % of all retailers). Based on question Q4.

Accuracy of environmental claims from retailers' perspective: percentage of retailers agreeing that most environmental claims about goods or services are reliable (Q12).

Retailers' confidence in online selling: retailers who are confident only when selling to consumers in own country + retailers who are confident when selling to both consumers in own country and in other EU countries (as % of all retailers). Based on question Q2.

Note: Country indicators have been defined by the unit E1 of DG Justice and Consumers and constructed in collaboration with the unit DDG.01 of the JRC (Ispra). Questions in the box are referring to the survey questionnaires (see appendix to chapter 1.5).

When starting the data checks the indicator of knowledge of consumers' rights about consumers was found quite noisy in its pillar (see further in Table 59), so an attempt was made to complement it with the indicator of numerical skills with the idea that a positive level of the numerical literacy was the prerequisite of the consumers' knowledge of their rights. However also the correlation between knowledge of consumers' rights and numerical skills showed to be very small, moreover they loaded on different components when running principal component analysis. Therefore the indicator of numerical skills was not included in the CCI eventually.

Possible explanation of this phenomenon might be:

- The existence of a substitution effect between knowledge and trust such that where consumers have high trust in organisations (e.g. in the Scandinavian countries) they have a less pronounced need to be aware and knowledgeable about their rights.
- Alternatively, it may be that knowledge of consumers' rights has an impact that is not acting at country level, but at micro-level. Therefore multivariate analysis is more insightful about the real influence of this variable, although not conclusive about the direction of the causal effects. With respect to this reasoning, it is appropriate to keep knowledge of consumers' rights in the CCI framework in the hope that future data will shed light on the issue.

Descriptive statistics of the country indicators are presented in Table 55.

Table 55: Indicators of the first pillar of the CCI on knowledge, awareness and trust

	<i>Pillar 1: Knowledge awareness and trust</i>									
	Knowledge of consumers' rights	Trust in organisations	Trust in redress mechanisms	Product safety	Accuracy of environmental claims	Confidence in online shopping	Retailers' knowledge of consumer rights	Product safety	Accuracy of environmental claims	Confidence in online selling
EU28	42.85	64.60	40.93	68.75	54.24	60.97	54.64	74.57	69.69	58.39
AT	44.08	76.47	46.34	81.53	62.31	69.71	54.54	84.03	67.55	48.46
BE	40.81	75.63	46.08	79.40	60.82	63.39	57.92	79.44	75.21	63.29
BG	38.94	45.28	30.41	50.39	43.45	31.66	43.06	63.95	56.55	34.86
CY	38.57	45.33	34.64	60.93	51.53	46.31	33.27	71.85	58.17	46.81
CZ	56.26	55.91	32.64	79.28	48.80	68.55	48.93	76.76	65.76	41.97
DE	51.40	63.97	37.90	74.01	41.20	63.27	63.01	76.76	65.43	51.56
DK	53.64	75.25	42.90	75.14	72.81	80.08	60.48	73.12	73.05	60.09
EE	44.28	68.64	27.78	76.65	60.46	55.96	49.20	80.48	67.75	39.49
EL	24.54	47.59	42.81	54.85	44.86	48.39	49.73	61.08	61.00	72.52
ES	46.91	59.24	37.30	62.20	52.92	53.92	54.26	69.25	70.34	80.48
FI	37.55	80.76	53.83	89.71	64.13	67.18	57.66	94.96	83.06	71.70
FR	35.79	67.47	46.99	65.47	58.66	67.60	58.58	71.93	69.75	72.45
HR	30.97	50.19	31.07	61.14	40.99	31.56	36.22	66.85	59.48	59.83
HU	34.52	76.25	37.67	71.67	65.04	47.86	54.23	80.06	83.60	30.95
IE	40.68	70.38	53.95	81.11	69.62	75.16	46.61	83.69	82.20	64.97
IS	43.22	59.56	38.12	70.63	52.10	73.78	60.10	81.85	59.48	70.37
IT	48.23	56.62	37.06	55.46	47.08	45.73	56.95	63.93	64.75	52.76
LT	29.26	56.17	28.18	66.64	57.69	45.26	46.10	75.02	53.63	55.08
LU	33.74	79.73	56.83	80.73	74.10	71.45	52.41	83.02	77.34	46.34
LV	41.45	59.33	36.33	62.35	59.34	48.03	47.63	76.87	75.00	60.88
MT	46.49	65.47	40.14	65.68	58.07	46.13	57.62	79.81	63.59	71.94
NL	41.13	78.32	48.82	83.00	53.24	74.58	55.15	84.52	65.31	64.53
NO	52.01	77.90	51.85	83.12	62.89	81.06	56.94	82.03	79.36	60.42
PL	43.00	62.19	37.22	71.77	61.36	58.32	50.37	69.11	72.57	45.37
PT	39.48	63.36	32.81	61.09	62.54	42.75	53.25	70.68	64.01	67.98
RO	35.21	55.68	49.22	50.31	51.07	51.87	56.52	51.79	81.72	50.97
SE	43.59	69.13	30.28	66.92	51.20	75.76	62.45	81.08	77.30	55.74
SI	42.15	49.45	21.95	58.89	51.34	53.04	51.58	76.45	63.83	45.10
SK	56.03	58.47	41.67	58.71	52.61	58.88	48.30	70.78	59.82	43.58
UK	36.70	76.88	47.46	83.43	67.61	80.46	41.59	83.01	78.56	58.47

Note: The indicators from the retailers' perspective are displayed in red.

The second pillar on compliance and enforcement (Table 56) contains indicators on consumers and retailers' exposure to unfair commercial practices (UCPs) and shopping problems, together with retailers' compliance and enforcement with consumer legislation. Box 18 provides more information about the calculation of these indicators.

Table 56: Indicators of the second pillar of the CCI on compliance and enforcement

	<i>Pillar 2: compliance and enforcement</i>				
	Unfair commercial practices	General shopping problems	Prevalence of unfair commercial practices in the sector	Compliance with consumer legislation	Enforcement of consumer legislation
EU28	76.14	86.86	66.79	67.87	62.16
AT	87.86	91.98	71.49	66.49	58.06
BE	82.71	88.95	75.59	71.87	69.99
BG	74.15	75.20	49.21	55.37	46.59
CY	77.58	90.58	67.69	61.18	56.01
CZ	72.26	90.27	53.61	56.98	46.60
DE	86.20	92.90	67.06	72.15	59.21
DK	79.30	93.36	82.18	66.54	62.92
EE	79.60	90.39	74.80	72.15	53.97
EL	69.21	80.12	53.96	61.24	50.72
ES	65.72	81.61	60.91	59.87	51.31
FI	74.34	94.33	69.39	76.11	73.61
FR	76.37	89.05	68.90	66.65	73.54
HR	62.85	76.48	57.60	56.85	45.34
HU	71.05	81.42	53.33	61.97	70.24
IE	83.73	81.77	72.03	69.77	73.58
IS	88.68	89.70	70.17	74.74	48.30
IT	74.67	84.98	67.36	61.80	58.61
LT	77.26	87.87	69.79	64.59	54.80
LU	91.31	94.89	78.22	77.05	67.74
LV	73.15	82.56	71.02	71.57	54.67
MT	84.88	87.54	64.68	65.44	57.66
NL	82.42	92.07	69.96	74.32	67.36
NO	80.05	90.84	70.23	73.02	77.27
PL	63.60	85.55	42.52	57.10	39.63
PT	79.85	89.16	68.10	53.90	56.11
RO	74.33	78.78	58.52	71.57	70.29
SE	74.76	92.67	71.82	71.78	59.79
SI	80.52	89.63	74.28	55.03	50.23
SK	69.34	82.81	50.90	60.77	51.26
UK	80.00	86.14	77.60	80.08	77.16

Note: The indicators from the retailers' perspective are displayed in red.

Box 18: Country indicators for the pillar on compliance and enforcement

Unfair commercial practices: expressed as one minus the average exposure to the five unfair commercial practices (Q13.1-Q13.5). Only unfair commercial practices encountered in the country of the survey respondent are taken into account.

General shopping problems: expressed as one minus the average share of problems per country with unfair contractual terms (Q16.1) and unanticipated charges (Q16.2). Only shopping problems encountered in the country of the survey respondent are taken into account.

Prevalence of unfair commercial practices in the sector: expressed as one minus the average prevalence of the six unfair commercial practices (Q7). Only unfair commercial practices encountered in the country of the survey respondent are taken into account.

Compliance with consumer legislation: average agreement rate with questions Q10.1 (competitors comply with legislation), Q10.2 (it is easy to comply) and Q10.3 (cost of compliance is reasonable).

Enforcement of consumer legislation: average agreement rates with questions Q8.1 ('Public authorities actively monitor and ensure compliance'), Q8.2 (NGOs), Q8.3 (self-regulatory bodies), Q8.4 (Media) and Q8.5 (product safety).

Note: The country indicators have been defined by the unit E1 of DG Justice and Consumers and constructed in collaboration with the unit DDG.01 of the JRC in Ispra. The questions in the box are referring to the survey questionnaires (see appendix to chapter 1.5).

The third pillar on Complaints and dispute resolution (Table 57) combines consumers' problems and complaints, with retailers' awareness of alternative dispute resolution bodies (ADRs) and their participation to ADRs. Indicators' definitions are presented in box 19.

Box 19: Country indicators for the pillar on complaints and dispute resolution

Problems and complaints indicator: see paragraph 2.2.1 for more information about the construction of this indicator.

Participation in ADR mechanisms: based on questions Q13a, Q13b and Q13c. Total of those who are willing or obliged to use them (answer n° 1) for Q13a and Q13b while for Q13c the following answers are included n° 1: yes and your industry is covered by the public systems for consumer dispute resolution and n° 2: yes and your industry has its own dispute resolution body.

Note: The country indicators have been defined by the unit E1 of DG Justice and Consumers and constructed in collaboration with the unit DDG.01 of the JRC in Ispra. The questions in the box are referring to the survey questionnaires (see appendix to chapter 1.5).

Table 57: Indicators of the second pillar of the CCI on complaints and dispute resolution

	<i>Pillar 3: complaints and dispute resolution</i>	
	Problems and complaints indicator	Participation in ADR mechanisms
EU28	88.21	29.71
AT	92.16	40.74
BE	91.83	31.08
BG	84.42	26.49
CY	91.66	16.67
CZ	89.35	21.06
DE	91.11	31.02
DK	91.72	34.49
EE	88.61	31.13
EL	84.91	26.28
ES	87.09	42.51
FI	88.68	41.81
FR	90.58	18.07
HR	81.23	24.99
HU	86.08	44.42
IE	85.82	31.19
IS	90.17	33.88
IT	83.46	20.20
LT	88.18	15.60
LU	93.38	29.49
LV	86.45	13.58
MT	89.86	53.54
NL	88.39	41.73
NO	90.57	46.57
PL	86.03	24.32
PT	90.55	30.15
RO	83.89	27.03
SE	91.53	69.30
SI	91.55	30.44
SK	88.56	23.83
UK	87.95	25.98

Note: The indicators from the retailers' perspective are displayed in red.

2.5.2.2 Step 2: Data checks

A preliminary look to summary statistics shows that there are no indicators with skewness greater than 2 together with a kurtosis greater than 3.5 likely to bias the final results (Table 58).

Table 58: Summary statistics by pillar

	Knowledge of consumers' rights	Trust in organisations	Trust in redress mechanisms	Product safety	Accuracy of environmental claims	Confidence in online shopping	Retailers' knowledge of consumer rights	Product safety	Accuracy of environmental claims	Confidence in online selling
mean	41.69	64.22	40.01	69.41	56.66	59.26	52.16	75.47	69.17	56.30
p50	41.29	63.67	38.01	68.78	57.88	58.60	53.74	76.76	67.65	57.11
min	24.54	45.28	21.95	50.31	40.99	31.56	33.27	51.79	53.63	30.95
max	56.26	80.76	56.83	89.71	74.10	81.06	63.01	94.96	83.60	80.48
st. dev.	7.65	10.96	8.79	10.86	8.87	14.22	7.23	8.67	8.64	12.46
p25	36.92	56.28	33.27	61.11	51.23	47.90	48.46	70.70	63.65	46.45
p75	45.94	75.54	46.83	79.37	62.48	71.02	57.45	81.66	76.78	64.86
skewness	0.05	-0.12	0.08	-0.03	0.06	-0.16	-0.85	-0.54	0.14	-0.09
kurtosis	-0.05	-1.13	-0.67	-1.05	-0.60	-0.92	0.61	0.98	-1.09	-0.71

	Unfair commercial practices	General shopping problems	Prevalence of UCPs in the sector	Compliance with consumer legislation	Enforcement of consumer legislation
mean	77.26	87.12	66.10	66.27	59.42
p50	77.42	89.00	69.15	66.51	57.86
min	62.85	75.20	42.52	53.90	39.63
max	91.31	94.89	82.18	80.08	77.27
st. dev.	7.18	5.41	9.61	7.44	10.44
p25	73.40	82.62	59.12	60.88	51.27
p75	81.94	90.78	71.74	72.08	69.43
skewness	-0.13	-0.61	-0.75	-0.04	0.18
kurtosis	-0.33	-0.58	-0.08	-1.17	-1.00

	Problems and complaints indicator	Participation in ADR mechanisms
mean	88.53	31.59
p50	88.64	30.30
min	81.23	13.58
max	93.38	69.30
st. dev.	3.03	12.06
p25	86.17	24.49
p75	90.98	39.18
skewness	-0.57	1.14
kurtosis	-0.39	2.02

Note: The indicators from the retailers' perspective are displayed in red.

Table 59 takes a closer look to the correlations within each pillar. This initial level of deepening aims to detect correlation values that are too low (i.e. highlighted in grey), too high (i.e. in bold), or too negative especially within the same pillar. While no strong issues arise about too high positive or negative correlation within the pillar, we record instead that noisy associations among indicators constitute the most widespread concern.

Many indicators have a low correlation (i.e. between -0.3 and 0.3) with other indicators of the same pillar. In these cases the correlations are so low that the indicator could be actually

suspected of introducing pure noise more than actual information. At pillar level, very low correlations between indicators and pillar scores do not mean that indicators are not about relevant aspects of consumers' conditions, rather that if countries improve their scores on 'noisy' indicators the improvement will not lead to an overall improvement of the respective pillar or of the overall index score.

In the first pillar, the knowledge of consumers' rights has correlations that are lower than the threshold of relevance in the majority of cases, with the lowest values related to the accuracy of environmental claims from consumers' and retailers' perspective. In addition to this indicator, also retailers' knowledge of consumers' rights and confidence in online selling in own country show particularly noisy correlations. Within the second pillar a correlation slightly below the threshold (i.e. 0.28) is encountered between general shopping problems and enforcement of consumer legislation. This does not constitute an issue, and actually this pillar looks to be the most balanced and well-framed of the three. Finally, in the third pillar the noisiest indicator is problems and complaints.

Despite the presence of noisy indicators in the first pillar, the JRC suggests to keep all the indicators in the final index to ensure comparability and continuity with future versions of the consumer conditions index.

Besides correlations across indicators, Table 59 also reports the pairwise correlations between indicators and the pillars to which they belong to. Problematic correlations emerge if the pillars are aggregated using arithmetic averages and equal weights. First, the table highlights the low correlation between knowledge of consumers' rights at pillar level. Second, the pillar shows a high correlation with trust in organisations, indicating that this indicator will drive the results of the pillar. As for the third pillar, a high correlation between the participation in ADRs mechanism and the pillar is observed.

Table 59: Correlations within pillars

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
	Knowledge of consumers' rights	Trust in organisations	Trust in redress mechanisms	Product safety	Accuracy of environmental claims	Confidence in online shopping	Retailers' knowledge of consumer rights	Product safety	Accuracy of environmental claims	Confidence in online selling	1st PILLAR (adjusted weights)	1st PILLAR (equal weights)
(1)	1										0.54	0.28
(2)	0.14	1									0.83	0.91
(3)	-0.06	0.64	1								0.57	0.71
(4)	0.20	0.83	0.51	1							0.72	0.84
(5)	0.00	0.75	0.52	0.61	1						0.55	0.71
(6)	0.37	0.71	0.57	0.75	0.51	1					0.84	0.87
(7)	0.35	0.48	0.26	0.22	0.14	0.45	1				0.73	0.20
(8)	0.16	0.72	0.29	0.85	0.52	0.59	0.21	1			0.62	0.73
(9)	0.01	0.68	0.59	0.49	0.61	0.51	0.34	0.34	1		0.59	0.68
(10)	-0.13	0.15	0.34	0.09	0.07	0.19	0.29	0.11	0.05	1	0.30	0.36

	(11)	(12)	(13)	(14)	(15)	
	Unfair commercial practices	General shopping problems	Prevalence of UCPs in the sector	Compliance with consumer legislation	Enforcement of consumer legislation	2nd PILLAR
(11)	1					0.79
(12)	0.61	1				0.68
(13)	0.70	0.63	1			0.87
(14)	0.55	0.44	0.61	1		0.83
(15)	0.40	0.28	0.52	0.68	1	0.78

	(16)	(17)	
	Problems and complaints indicator	Participation in ADR mechanisms	3rd PILLAR
(16)	1		0.49
(17)	0.28	1	0.98

Note: The indicators from the retailers' perspective are displayed in red.

In order to obtain an equal contribution of the indicators within the first pillar and to ensure a more balanced distribution of the three pillars in relation to the CCI index, the following aggregation method has been proposed to calculate the 10th edition of the consumer conditions index:

- The first pillar is divided in two sub-pillars on 1) knowledge and awareness (including the consumers' and retailers' knowledge of consumer rights and 2) trust (including the remaining indicators. Each sub-pillar is aggregated using arithmetic averages with equal weights;
- To obtain the three pillar aggregations, underlying indicators (for pillar 2 and 3) or underlying sub-pillars (for pillar 1) are aggregated using arithmetic averages with equal weights;
- Finally the CCI index is obtained by arithmetic averages of the three pillar aggregations (described in the previous step).

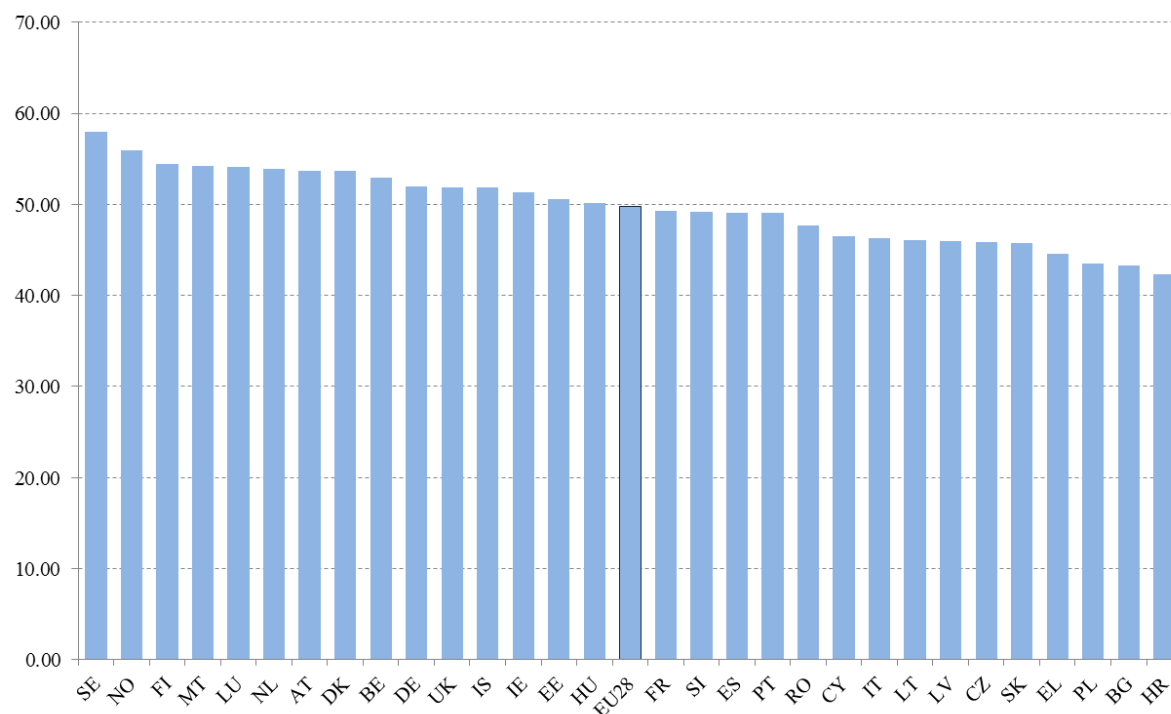
Given this procedure, the indicators of knowledge of consumer rights are getting more weight and hence contribute more equally to the first pillar (see the adjusted weight pillar in Table 59). In addition, adjusting the weights leads to a more balanced contribution of the different pillar aggregations to the CCI index (see Table 60).

Table 60: Correlation between pillars and with respect to the CCI

	(1)	(2)	(3)	CCI (adjusted weights)		(1)	(2)	(3)	CCI (equal weights)
(1) pillar 1	1			0.89	(1) pillar 1	1			0.91
(2) pillar 2	0.67	1		0.82	(2) pillar 2	0.76	1		0.85
(3) pillar 3	0.60	0.39	1	0.80	(3) pillar 3	0.53	0.39	1	0.77

Applying the abovementioned modelling choices, the following CCI index is obtained for the 28 Member States of the European Union, Norway and Iceland (Figure 13).

Figure 13: 10th edition of the consumer conditions index for the EU-28, Norway and Iceland



2.5.2.3 *Step 3: Statistical coherence*

The construction of a composite indicator to rank countries is subject to various choices related to the normalisation procedure, the assignation of weights to the indicators, and the aggregation method. In this paragraph we perform some robustness analyses to evaluate the statistical soundness of composite indicators. As the various modelling choices and their consequences on a composite indicator have been discussed in chapter 1.3, we directly present the results of the sensitivity analyses.

A first set of alternative modelling choices that have been evaluated are the normalisation procedure (i.e. normalised indicators based on z-scores and min-max method) and the aggregation method (i.e. geometric averages when aggregating the different pillars into the index). The shift in country rankings related to the standardization and weighting schemes are presented in Table 61. Adjustments in the aggregation formula and the normalisation do not alter country rankings dramatically since most countries report ranking shifts of one or two places

while a relative low number of countries shifting three places. Overall, the geometric average seems to have the lowest effect.

Table 61: Shifts in ranking according to standardization and weighting

Shifts in ranking							
	z-scores	min-max	geometric average		z-scores	min-max	geometric average
EU28	0	-1	0	IT	-2	-2	-1
AT	-2	-2	1	LT	-1	0	0
BE	1	2	0	LU	3	3	-1
BG	0	0	0	LV	3	3	0
CY	-1	-1	-1	MT	-1	-2	0
CZ	1	1	0	NL	-1	-1	0
DE	1	1	0	NO	0	0	0
DK	-1	-1	0	PL	2	1	1
EE	1	0	0	PT	-1	-1	0
EL	0	0	0	RO	-3	-3	0
ES	0	0	1	SE	0	0	0
FI	0	0	0	SI	1	1	0
FR	1	2	-1	SK	1	1	1
HR	0	0	0	UK	1	1	0
HU	-1	-1	0	min	-3	-3	-1
IE	-2	-1	0	max	3	3	1
IS	0	0	0	N shifts	22	21	8

In a similar Monte-Carlo simulation as described in chapter 1.3, we assessed the effect of simultaneous changes in the modelling options, allowing for various aggregation methods (arithmetic versus geometric averages), normalisation methods (no normalisation versus normalisation with min-max method) and various weighting schemes at pillar level (varying between 0.15 and 0.48).

Figure 14: Uncertainty analysis (CCI rank vs. median rank, 90% confidence intervals)

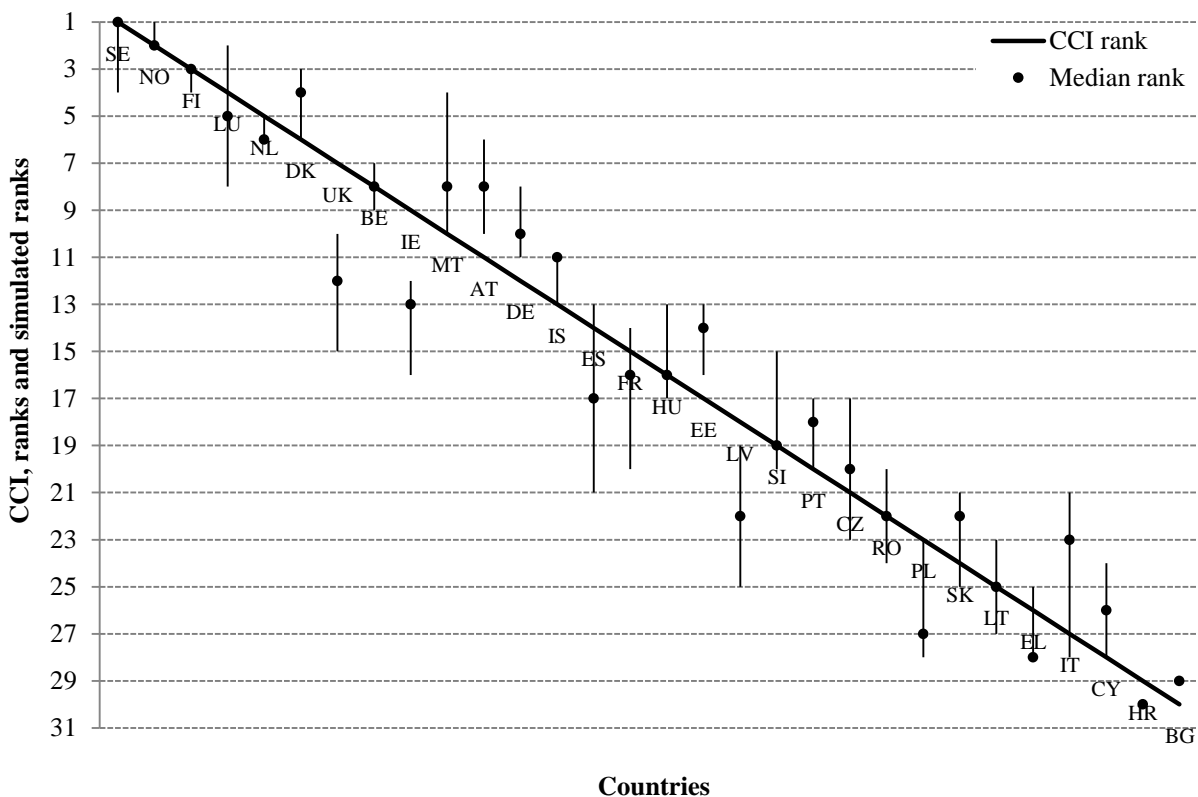


Figure 5 shows median ranks and 90% confidence intervals of the CCI computed across the 4,000 Monte Carlo simulations. Countries are ordered from best to worst according to their CCI rank (black line), the median rank is indicated by the dot, while the bars represent for each country the 90% confidence interval across all simulations. Overall, CCI ranks are proved to remain quite robust since the median rank stays relatively close to the reference rank for most of the countries. Countries with the highest divergence to the median rank are UK, Ireland, Latvia, Poland and Italy with shifts around four-five places, while other countries report only shifts of one or two places.

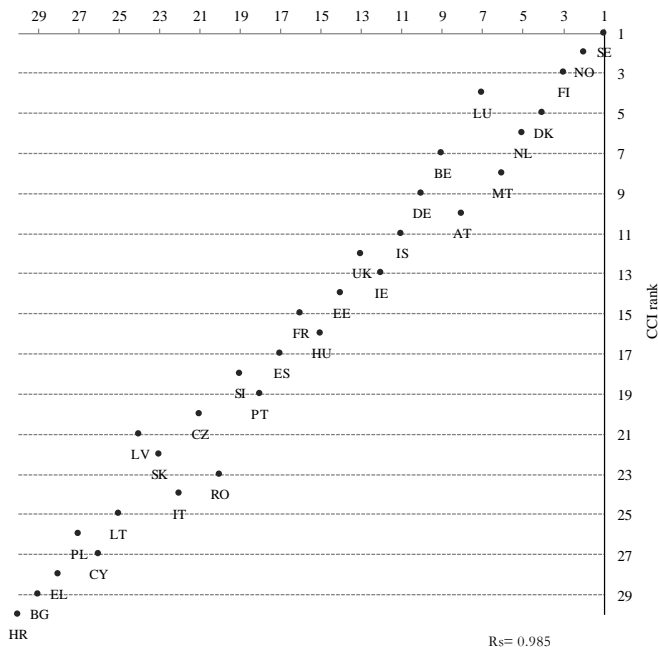
Disentangling the shifts in rankings of the Monte-Carlo simulations across the various modelling choices, we observe that the highest impact is due to the normalisation method (see Figure 15).

Figure 15: Sensitivity analysis - impact of modelling choices

Consumer Condition Index

Sensitivity of ranking due to changes in normalisation

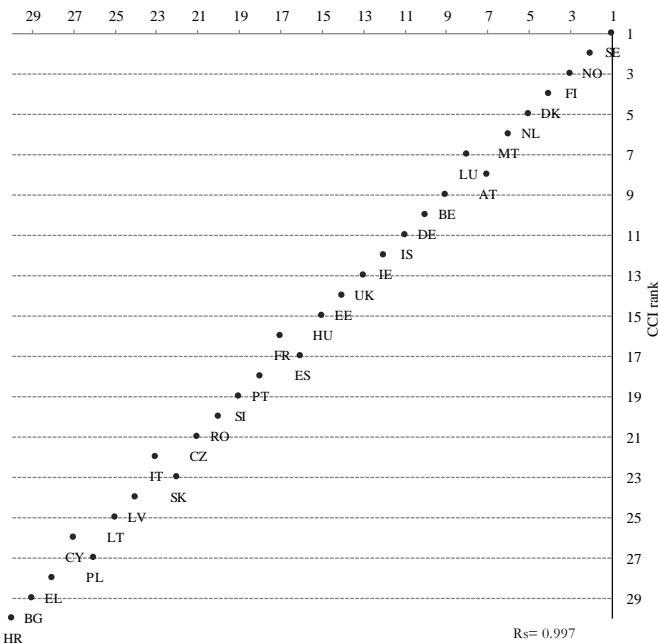
Arithmetic average assumed



Consumer Condition Index

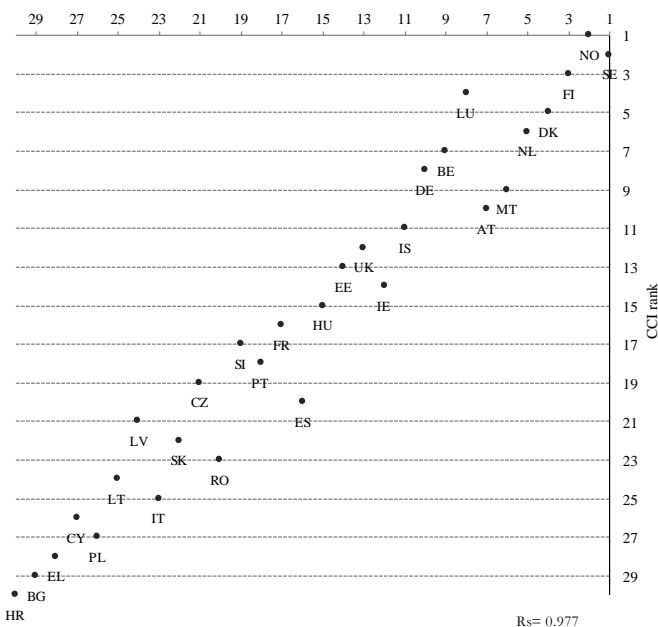
Sensitivity of ranking due to changes in averaging methods

Non-normalisation assumed



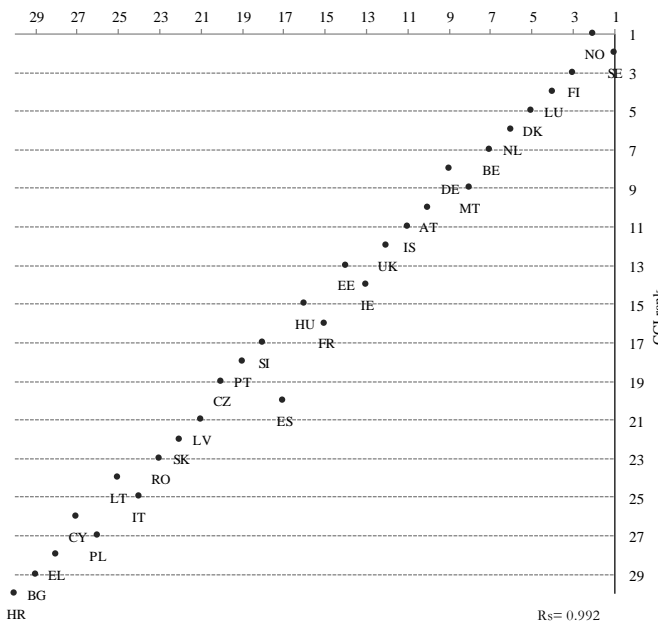
Sensitivity of ranking due to changes in normalisation

Geometric average assumed



Sensitivity of ranking due to changes in averaging methods

Normalisation assumed



2.5.3 Conclusions

This chapter provides a comprehensive of the development steps and sensitivity analyses of the 10th edition of the consumer conditions index. The index is extensively revised compared to the previous edition (see paragraph 1.3) since it is constructed along the updated framework for measuring consumer conditions in the European Union (see paragraph 1.5).

The index contains three pillars that reflect the underlying dimensions of the framework: 1) knowledge, awareness and trust, 2) compliance and enforcement, and 3) complaints and resolution of problems. In addition it preserves the symmetric construction of the framework along the consumers' and retailers' perspective by including measurements of both market participants in the index. As the CCI is constructed at country level and allows for benchmarking of the national consumer environment, all measurements are based on domestic transactions. The dataset used for constructing the CCI stems from raw data of the EC consumers' and retailers' surveys conducted in autumn 2014. The CCI is calculated for all Member States of the European Union, Norway and Iceland.

The presented sensitivity and uncertainty analyses reveal that the 10th edition of the consumer conditions index remains relatively robust due to changes in the various modelling choices related to the normalisation procedure, the aggregation method and the weighting scheme.

Conclusions

This report aims to identify the scope for conceptual and empirical improvements to the EC Consumer Conditions Scoreboard by the Consumers Directorate of DG Justice and Consumers of the European Commission. For this purpose, we explore the economic theory of consumer decision making, the regulatory framework of consumer protection in the EU, the statistical properties of the Consumer Conditions Index included in the EC scoreboard (the 9th edition), and the structure and content of other (national) consumer surveys developed internationally. As a result we develop an updated framework to measure consumer conditions in EU countries, and we propose a revision of questionnaires for the EC surveys of consumers and retailers. The second part of the report presents an empirical investigation of the micro data from the revised EC surveys of consumers and retailers.

The economic theory discussed in chapter 1.1 of the report reveals that consumer conditions are about imperfect information, shaped by the interplay between the supply and reception of information about goods and services. It follows that measures to improve consumer conditions concerns both the supply of accurate information and consumers' abilities to acquire, comprehend and interpret information about goods and services. These measures can be provided by firms, (informal) consumer networks, and government legislation.

Having screened the theoretical literature about factors that shape consumer conditions, we then review the main legislative provisions for consumer protection at the EU level in chapter 1.2. In this chapter, we focus on EU legislation that applies across markets without the claim of being comprehensive. The review encompasses early EC legislative initiatives on misleading advertising enacted in 1984, the cornerstone of European consumer protection represented by the Directive for unfair contract terms adopted in 1993, and the more recent regulatory measures (i.e. the Directive for Consumer Rights adopted in 2011, the Directive for consumer ADR adopted in 2013, and the Regulation for consumer ODR adopted in 2013). The objective of the review is to identify key concepts of consumer protection relevant at the EU level, concepts viewed as common denominators for consumer conditions across the Member States. The concepts identified serve as a basis for the understanding of the empirical implementation of the measurement of consumer conditions in the subsequent chapters.

Chapter 1.3 presents the statistical audit of the 9th Consumer Conditions Index (CCI). The CCI employs data on 12 quantitative indicators, and it accounts for five main pillars on consumer conditions: trust, enforcement, complaints, redress, and product safety. We investigate the statistical coherence of these pillars, and analyse the impact of different modelling assumptions on the country rankings. The analysis reveals that the relative importance of the five dimensions is unbalanced, since the index is primarily driven by the dimensions of trust and product safety. Based on principal component analysis, we find that the CCI is better structured in three summarising dimensions. Eventually, a sensitivity analysis of modelling assumptions shows that the country rankings are fairly robust to alternative choices for the aggregation method, normalization formula, or weights.

Chapter 1.4 provides an overview of national surveys on consumers and retailers. This analysis focuses on surveys for which the documentation is available online. It includes consumers' surveys from Australia, New Zealand, Sweden, the United Kingdom, and the US. Only one retailers' survey, carried out in Australia, could be found. The EC Consumer Conditions Scoreboard has several elements in common with the country-level surveys analysed, especially in terms of knowledge, awareness of consumer legislation, complaints handling, and resolution of consumer problems. The main differences between the EC Scoreboard and other national surveys are both in the scope and the purpose. With respect to the scope, the EC scoreboard is designed to reflect consumer conditions across the EU, including cross-border transactions, while other surveys contain only domestic information. About the objective, several country surveys focus on particular aspects (e.g., UK surveys on consumer detriment and on unfair commercial practices), while the EC survey provides a general overview of consumer conditions. Nevertheless, despite these differences, we find that some measures developed at country-level can be informative at EU-level.

In chapter 1.5, we introduce the structure of the updated framework to measure consumer conditions across the EU. From a conceptual perspective, the framework covers the key concepts identified earlier in the reviews described above, and it has the following main advantages:

- The structure allows for symmetry between the issues measured for domestic transactions and those related to cross-border transactions within the EU.
- The framework enables a more concise organisation of the EC scoreboard with increased potential for analysis and public communication. It contains three dimensions: 1) knowledge, awareness and trust of consumers and retailers with respect to consumer protection at home and cross-border; 2) compliance and enforcement; and 3) resolution of consumer complaints related to domestic and cross-border transactions.
- The framework accounts for two components in each dimension: 1) core indicators to be measured regularly so to enable the monitoring of trends in consumer conditions over time; and 2) a flexible component which, depending on current policy priorities, can vary from one edition of the scoreboard to another.
- The framework provides stronger emphasis on unfair commercial practices, types of consumer problems, consumer shopping skills, consumer vulnerabilities, and the perceptions of retailers with respect to the efficiency of regulatory measures for consumer protection.

Throughout chapter 1.5, we propose a revision of the questionnaire of the EC consumers' and retailers' surveys. The revised surveys are primarily based on Eurobarometer surveys of consumers and retailers used for the 9th edition of the EC scoreboard published in 2013. Existing questions are revised, and new items are introduced into the survey (e.g., consumer survey: trust in environmental claims, exposure to cross-border and domestic UCPs; retailer survey: experience and confidence about online selling). The chapter discusses potential indicators that can be derived from the revised survey questionnaires.

Eventually, this chapter presents possible avenues of analysis on consumer conditions. This includes for example a clustering analysis of the Member States with respect to the three dimensions of consumer conditions, an analysis of the internal market based on the indicators at EU-level identified, and microeconomic analyses of individual perceptions and experiences in the marketplace.

The aforementioned revised EC surveys have been used in the first half of 2014 to collect micro-data on respectively 28091 consumers and 11000 retailers across the EU.⁶⁰ Part 2 of this report provides an empirical investigation carried out on this micro-data. Chapter 2.1 presents multivariate analyses to explore consumer conditions along different socio-demographic characteristics, attitudes and personality traits. The empirical models on consumer and retailer issues provide useful insights for future framing of policy measures. Policy measures could for instance be focused on better informing and protecting consumers with financial difficulties as the empirical results show that this group of consumers is less knowledgeable about consumer rights, more associated with victimisation and less keen to complain. With respect to retailers, firms in the food industry are less knowledgeable about legislation, less likely to sell online and less prone to use ADR mechanisms, compared to their counterparts active in non-food sectors and services. Hence, policies could be set up to guide them on these particular issues.

Chapter 2.2 explores the use of different indicators for consumer conditions with respect to consumer complaints, consumer knowledge and trust, with the recommendation to use them in future versions of the consumer conditions and policy frames.

In chapter 2.3 we compare the sample structure of the EC consumer survey with population data reported by Eurostat in order to explore the representativity of sample data with respect to age groups and gender at country level. Overall, the analysis indicates that the country samples of the consumers in this survey are relatively balanced across EU 28 Member States with respect to age and gender. We recommend the inclusion of education as an additional criterion for the sampling of consumers, and the provision of detailed technical specifications of sampling issues and survey weights.

In chapter 2.4 we focus on the sample structure of the EC survey of retailers, and consider the following issues: 1) the inclusion of micro-enterprises in future waves of the EC surveys, and 2) the representativity of the sample structure of the EC retailers' survey for the population of firms in economic sectors of high relevance for the analysis of consumer conditions. The analysis

⁶⁰ TNS Political & Social was commissioned by DG SANCO to conduct the field work on these surveys.

indicates that micro-enterprises bring in significant contributions to the EU Single Market and, as a result, we recommend including these types of firms in the sample of upcoming EC surveys or retailers. Concerning the second issue, larger discrepancies between the sample structure and the respective population structure of firms are found when analysing the percentages of firms active in each of the selected sectors. In contrast, the analysis with respect to the type of firms (small, medium, large) indicates relatively more balance samples across countries. Overall, we recommend a thorough revision of the sampling method to overcome large discrepancies of the survey data with population figures. This reflection should go along with the advice in chapter 1.5 about the drawbacks of the interviewing method, the sample design, and the target population of the retailer EC survey.

Eventually, chapter 2.5 presents the development and the statistical audit of the 10th Consumer Conditions Index. This index is extensively revised with respect to the previous version presented in chapter 1.3., in order to reflect the updated framework of consumer conditions in the European Union. Hence, the index is constructed along the three main pillars of the framework: 1) knowledge, awareness and trust, 2) compliance and enforcement, and 3) complaints and resolution of problems. All indicators are selected as to provide a comprehensive overview of consumer conditions in each country for domestic transactions. In addition, each pillar preserves as much as possible the symmetry between the consumers and retailers perspective. The data to construct the indicators stem from the EC consumer and retailer surveys conducted in 2014 (see appendix to chapter 1.5). The statistical coherence of the index has been investigated using sensitivity and uncertainty analyses and reveals that the index remains relatively robust to alternative choices for the aggregation method, normalization formula, or weights.

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Appendix

Appendix to chapter 1.2: list of the reviewed EU legislative measures and recommendations

- Directive on Misleading Advertising – Directive 84/450/EEC
- Doorstep Selling Directive – Directive 85/577/EEC
- Unfair Contract Terms Directive - Directive 93/13/EEC
- Distance Selling Directive – Directive 97/7/EC
- Directive on Misleading Advertising, including Comparative Advertising – Directive 97/55/EC
- Comparative Advertising Directive – Directive 97/55/EC
- Price Indication Directive – Directive 98/6/EC
- Alternative Dispute Resolution Recommendation – Recommendation 98/257/EC
- Sales Directive – Directive 1999/44/EC
- Alternative Dispute Resolution Recommendation – Recommendation 2001/310/EC
- Directive Unfair Commercial Practices – Directive 2005/29/EC
- Consumer Rights Directive – Directive 2011/83/EU
- Directive on Consumer ADR - Directive 2013/11/EU
- Regulation on Consumer ODR - Regulation 524/ 2013

Table 62 EU legislative measures and recommendations on general consumer issues⁶¹

1984	1985	1986	1987	1990	...	1993	1994	1997	1998	1999	2000	2001	2002	...	2005	2006	2007	...	2011	2012	2013	2014	2015	2016	...		
Misleading Advertising Directive 84/450/EEC (amended Directive of Comparative Advertising adopted in 1997, and by Directive on Unfair Commercial Practices adopted in 2005)																											
Doorstep Selling Directive 85/577/EEC (repealed by Directive on Consumer Rights adopted in 2011)																											
Unfair Contract Terms Directive 93/13/EEC (amended by Consumer Rights Directive adopted in 2011)																											
Distance Selling Directive 97/7/EC (amended by Directive on Unfair Commercial Practices adopted in 2005, repealed by Directive on Consumer Rights adopted in 2011)																											
Comparative Advertising Directive 97/55/EC (amended by Directive on Unfair Commercial Practice adopted in 2005)																											
Indication of Prices Directive 98/6/EC (repeals Directive 79/581/EEC and Directive 88/314/EEC)																											
ADR Recommendation 98/ 257/ EC																											
Sales Directive 1999/44/EC (amended by Consumer Rights Directive adopted in 2011)																											
ADR Recommendation 2001/ 310/ EC																											
Unfair Commercial Practices Directive 2005/29/EC																											
Regulation 861/ 2007 on European Small Claims Procedure																											
Consumer Rights Directive 2011/83/EU																											
ADR Directive 2013/11/EU																											
ODR Regulation 524/ 2013																											

⁶¹ Directive 79/581/EEC and Directive 88/314/EEC are not discussed in this report.

Directive 79/581/EEC - Council Directive 79/581/EEC of 19 June 1979 on consumer protection in the indication of the prices of foodstuffs
 Directive 84/450/EEC - Council Directive 84/450/EEC of 10 September 1984 relating to the approximation of the laws, regulations and administrative provisions of the Member States concerning misleading advertising
 Directive 85/577/EEC - Council Directive 85/577/EEC of 20 December 1985 to protect the consumer in respect of contracts negotiated away from business premises
 Directive 88/314/EEC - Council Directive 88/314/EEC of 7 June 1988 on consumer protection in the indication of the prices of non-food products
 Directive 93/13/EEC - Council Directive 93/13/EEC of 5 April 1993 on unfair terms in consumer contracts
 Directive 97/7/EC - Directive 97/7/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts
 Directive 97/55/EC - Directive 97/55/EC of European Parliament and of the Council of 6 October 1997 amending Directive 84/450/EEC concerning misleading advertising so as to include comparative advertising
 Directive 98/6/EC - Directive 98/6/EC of the European Parliament and of the Council of 16 February 1998 on consumer protection in the indication of the prices of products offered to consumers
 Recommendation 98/257/EC - 98/257/EC: Commission Recommendation of 30 March 1998 on the principles applicable to the bodies responsible for out-of-court settlement of consumer disputes
 Directive 1999/44/EC - Directive 1999/44/EC of the European Parliament and of the Council of 25 May 1999 on certain aspects of the sale of consumer goods and associated guarantees
 Recommendation 2001/310/EC - Recommendation of 4 April 2001 on the principles for out-of-court bodies involved in the consensual resolution of consumer disputes
 Directive 2005/29/EC - Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council ('Unfair Commercial Practices Directive')
 Regulation 861/ 2007 - Regulation (EC) No 861/2007 of the European Parliament and of the Council of 11 July 2007 establishing a European Small Claims Procedure
 Directive 2011/83/EU – Directive 2011/83/EU of the European Parliament and of the Council of 25 October 2011 on consumer rights, amending Council Directive 93/13/EEC and Directive 1999/44/EC of the European Parliament and of the Council and repealing Council Directive 85/577/EEC and Directive 97/7/EC of the European Parliament and of the Council
 Directive 2013/11/EU - Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013 on alternative dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Directive on consumer ADR)
 Regulation 524/ 2013 - Regulation (EU) No 524/2013 of the European Parliament and of the Council of 21 May 2013 on online dispute resolution for consumer disputes and amending Regulation (EC) No 2006/2004 and Directive 2009/22/EC (Regulation on consumer ODR)

Appendix to chapter 1.3: statistical audit of the 9th edition of the consumer conditions index

Correlation analysis based on principal components for the Trust pillar is presented below (Table 64), and does not reveal particular problem. Principal component analysis for other pillars is redundant since they only contain two indicators, hence the components are just the correlations among the indicators.

Table 63 Conversion table for country codes

Code	Country
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom
HR	Croatia
IS	Iceland
NO	Norway

Table 64 Principal component analyses

Trust pillar				
	Eigenvalue	Variance explained %	Indicators	PC1
PC1	3.24	81.04	Trust1	0.96
PC2	0.47	11.68	Trust2	0.89
PC3	0.20	5.01	Trust3	0.83
PC4	0.09	2.27	Trust4	0.91
			Expl.Var	3.24
			Pcp.Totl	0.81

Appendix to chapter 1.5: final EC survey questionnaires on consumers and retailers

Questionnaire Consumers' attitudes towards cross-border trade and consumer protection 06/02/2014

VERSION AFTER FINALISATION MEETING

Target: population 15+

Coverage: EU28+Iceland+Norway

Total question units: 30QU

DK/NA = don't know/no answer – always spontaneous

(OUR COUNTRY) will be replaced by the name of the country in each country

(NATIONALITY) will be replaced by the nationality of the country in each country

Q1 is always the question about nationality

SPLIT BALLOT⁶²: needed

⁶² A split ballot is a procedure where a sample is divided into two halves and each receives a slightly different questionnaire – ESOMAR definition.

D SOCIO-DEMO / BACKGROUND

ASK ALL

D01 What is your nationality?

--°

0QU

ASK ALL

D1 How old are you?

(WRITE DOWN - IF "REFUSAL" CODE '99')

--°

0QU

ASK ALL

D2 Gender

Male

1

Female

2

0QU

ASK ALL

D4 How old were you when you stopped full-time education?

(INT.: IF "STILL STUDYING", CODE '00' - IF "NO EDUCATION" CODE '01'
- IF "REFUSAL" CODE '98' - IF "DK" CODE '99')

--°

0QU

ASK ALL

D5 As far as your current occupation is concerned, would you say you are self-employed, an employee, a manual worker or would you say that you are without a professional activity? Does it mean that you are a (n)...

IF A RESPONSE TO THE MAIN CATEGORY IS GIVEN, READ OUT THE
RESPECTIVE SUB-CATEGORIES

SELF-EMPLOYED

Farmer, forester, fisherman

1

Owner of shop, craftsman

2

Professional (lawyer, medical practitioner, accountant, architect...)

3

Manager of a company

4

Other

5

EMPLOYEE

Professional (employed doctor, lawyer, accountant, architect...)

6

General management, director or top management

7

Middle management

8

Civil servant

9

Office clerk

10

Other employee (salesman, nurse, etc...)

11

Other

12

MANUAL WORKER

Supervisor \ foreman (team manager, etc ...)

13

Manual worker

14

Unskilled manual worker

15

Other

16

WITHOUT A PROFESSIONAL ACTIVITY

Looking after the home	17
Student (full time)	18
Retired	19
Seeking a job	20
Other	21

Refusal (DO NOT READ OUT) 22

0QU

ASK ALL

D6 How often do you use the Internet for private purposes?
(ONE ANSWER ONLY)

Every day or almost every day	1
At least once a week (but not every day)	2
At least once a month (but not every week)	3
Less than once a month	4
Hardly ever	5
Never	6
DK/NA	7

FL 332 D6 TREND MODIFIED 1QU

ASK ALL

D12 In which region do you currently live?
(READ OUT IF NECESSARY - ONE ANSWER ONLY)

-- °

0QU

ASK ALL

D13 Would you say you live in a...?
(READ OUT – ONE ANSWER ONLY)

Rural area or village	1
Small or middle sized town	2
Large town	3
DK (DO NOT READ OUT)	4

0QU

ASK D18 IF RESPONDENT WAS REACHED ON A FIXED/LANDLINE PHONE (PH1=2)

D18 Have you got a mobile phone?

Yes	1
No	2

0QU

ASK D20 IF RESPONDENT WAS REACHED ON MOBILE PHONE (PH1=1)

D20 Have you got a landline phone?

Yes	1
No	2

0QU

INTERVIEWER INSTRUCTION:

A RETAILER IS THE SELLER OF A **GOOD** (EITHER SHOP OR WEBSITE) (M)

A SERVICE PROVIDER IS THE SELLER OF A **SERVICE** (EITHER SHOP OR WEBSITE) (M)

ASK Q1 IF "USE THE INTERNET FOR PRIVATE REASONS", code 1 to 5 in D6

Q1 In the past 12 months, have you purchased any goods or services via the Internet? (M)
(READ OUT – MULTIPLE ANSWERS POSSIBLE)

Yes, from a retailer or service provider located in (OUR COUNTRY)	1
Yes, from a retailer or service provider located in another EU country	2
Yes, from a retailer or service provider located outside the EU	3
No	4
Yes, you purchased online but do not know where the retailer or service provider is located (DO NOT READ OUT) (N)	5
DK/NA	6

FL 358 Q14 TREND MODIFIED

1QU

ASK ALL

Q2 In the past 12 months, have you purchased any goods or services through channels other than the Internet from a retailer or service provider located in another EU country?
(ONE ANSWER ONLY)

Yes	1
No	2
DK/NA	3

NEW

1QU

Ask All

Q3 How strongly do you agree or disagree with each of the following statements. In (OUR COUNTRY)...
(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Strongly agree	Agree	Disagree	Strongly disagree	DK/NA
1	You trust public authorities to protect your rights as a consumer	1	2	3	4	5
2	In general, retailers and service providers respect your rights as a consumer(M)	1	2	3	4	5
3	You trust non-governmental consumer organisations to protect your rights as a consumer (M)	1	2	3	4	5
4	It is easy to settle disputes with retailers and service providers through an out-of-court body (i.e. arbitration, mediation or	1	2	3	4	5

	conciliation body)					
5	It is easy to settle disputes with retailers and service providers through the courts	1	2	3	4	5
6	Most environmental claims about goods or services are reliable (N)	1	2	3	4	5

FL 358 Q1.1, Q1.2, Q1.4, Q1.5, Q1.6. TREND MODIFIED

3.5QU

ASK ALL

INTERVIEWER INSTRUCTION:

READ OUT: “Product safety” relates to consumer products only and does not include industrial products. Unsafe products are those which fail to comply with safety standards. Here we are not talking for example about rifles or knives. (M)

Q4 Thinking about all non-food products currently on the market in (OUR COUNTRY), do you think that...?

(READ OUT – ONE ANSWER ONLY)

Essentially all non-food products are safe	1
A small number of non-food products are unsafe	2
A significant number of non-food products are unsafe	3
It depends on the product (DO NOT READ OUT)	4
DK/NA	5

FL 358 Q2

1QU

ASK ALL

Q5 Considering everything you have bought during the last two weeks, did the environmental impact of any goods or services also influence your choice?

(READ OUT – ONE ANSWER ONLY)

Yes, for all or most goods or services you bought	1
Yes, but only for some	2
Yes, but only for one or two	3
No	4
DK/NA	5

FL 358 Q4 TREND MODIFIED

1QU

ASK ALL

Q6 Suppose you ordered a new electronic product by post, phone or the Internet, do you think you have the right to return the product 4 days after its delivery and get your money back, without giving any reason? (M)

(READ OUT – ONE ANSWER ONLY)

Yes	1
No	2
It depends on the product (N)	3
DK/NA	4

FL 358 Q6 TREND MODIFIED

1QU

ASK ALL

Q7 Imagine that an electronic product you bought new 18 months ago breaks down without any fault on your part. You didn't buy or benefit from any extended commercial guarantee. Do you have the right to have it repaired or replaced for free? (M)
(READ OUT – ONE ANSWER ONLY)

Yes	1
No	2
It depends on the product (N)	3
DK/NA	4

FL 358 Q7 TREND MODIFIED **1QU**

ASK ALL

Q8 Imagine you receive two educational DVDs by post that you have not ordered, together with a 20 euro invoice for the goods. Are you obliged to pay the invoice?
(READ OUT – ONE ANSWER ONLY)

No, and you are not obliged to return the DVDs (M)	1
No, provided that you return the DVDs (M)	2
Yes, you are obliged to pay	3
DK/NA	4

FL 358 Q19 **1QU**

ASK ALL

Q9 In the past 12 months, have you experienced any problem when buying or using any goods or services in (OUR COUNTRY) where you thought you had a legitimate cause for complaint?
(READ OUT – ONE ANSWER ONLY)

Yes, and you took action to solve the problem	1
Yes, but you did not do anything	2
No	3
DK/NA	4

FL 358 Q10 TREND SLIGHTLY MODIFIED **1QU**

ASK IF “Yes and you took action to solve the problem”, code 1 in Q9

Q10 And what did you do?
(READ OUT – MULTIPLE ANSWERS POSSIBLE)

You complained about it to the retailer or service provider	1
You complained about it to the manufacturer	2
You complained about it to a public authority	3
You brought the matter to an out-of-court dispute resolution body (ADR) such as an ombudsman, arbitration, mediation or conciliation body	4
You took the business concerned to court	5
Other (DO NOT READ OUT)	6
DK/NA	7

FL 358 Q11 TREND **1QU**

ASK Q11.1 IF “You complained about it to the retailer or service provider”, CODE 1 in Q10

ASK Q11.2 IF “You complained about it to the manufacturer”, CODE 2 in Q10

ASK Q11.3 IF “You complained about it to a public authority”, CODE 3 in Q10

ASK Q11.4 IF “You brought the matter to an out-of-court dispute resolution body (ADR) such as an ombudsman, arbitration, mediation or conciliation body”, CODE 4 in Q10

ASK Q11.5 IF “You took the business concerned to court”, CODE 5 in Q10

Q11 In general, how satisfied or dissatisfied were you with the way your complaint(s) was (were) dealt with by the....: (M)
(READ OUT – ONE ANSWER PER LINE)

		Very satisfied	Fairly satisfied	Not very satisfied	Not at all satisfied	DK/NA
1	(ASK ONLY IF CODE 1 IN Q10) Retailer or service provider	1	2	3	4	5
2	(ASK ONLY IF CODE 2 IN Q10) Manufacturer	1	2	3	4	5
3	(ASK ONLY IF CODE 3 IN Q10) Public authority	1	2	3	4	5
4	(ASK ONLY IF CODE 4 IN Q10) An out-of-court dispute resolution body (ADR)	1	2	3	4	5
5	(ASK ONLY IF CODE 5 IN Q10) Court	1	2	3	4	5

FL 358 Q12

3 QU

ASK IF “Yes – but you did not do anything”, CODE 2 IN Q9

Q12 What were the main reasons why you did not take any action?
(READ OUT – ROTATE – MULTIPLE ANSWERS POSSIBLE)

You were unlikely to get a satisfactory solution to the problem you encountered	1
The sums involved were too small	2
You did not know how or where to complain	3
You were not sure of your rights as a consumer	4
You thought it would take too long	5
You tried to complain about other problems in the past but were not successful	6
You thought complaining would have led to a confrontation, and you do not feel at ease in such situations (N)	7
Other (DO NOT READ OUT)	8
DK/NA	9

FL 358 Q13 TREND MODIFIED (new item added)

**1Q
U**

ASK ALL

Q13 I will read you some statements about unfair commercial practices. After each one, please tell me whether you have experienced it during the last 12 months...? (M)
(READ OUT – ROTATE/OPTION 5 NO ROTATION – MULTIPLE ANSWERS PER LINE, ANSWER OPTIONS 4 and 5 = SINGLE RESPONSE)

		Yes, with retailers or services providers located in (OUR COUNTRY) (M)	Yes, with retailers or services providers located in another EU country(M)	Yes, but you don't know in which country the retailers or services providers were located (DO NOT READ OUT)(N)	No	DK /N A
1	You have been informed you won a lottery you did not know about, but you were asked to pay some money in order to collect the prize	1	2	3	4	5
2	You have felt pressured by persistent sales calls or messages urging you to buy something or sign a contract	1	2	3	4	5
3	You have been offered a product advertised as free of charge which actually entailed charges	1	2	3	4	5
4	You have come across advertisements stating that the product was only available for a very limited period of time but you later realised that it was not the case	1	2	3	4	5
5	You have come across other unfair commercial practices	1	2	3	4	5

NEW

3QU | |

Q14 - SPLIT

ASK Q14a IF “SHOP ONLINE IN OUR COUNTRY AND IN ANOTHER EU COUNTRY”, CODE 1 AND 2 in Q1

Q14a I will read you some statements about problems consumers may have when shopping online. Please tell me whether you have experienced any of them during the last 12 months...? (M)

(READ OUT – ROTATE – MULTIPLE ANSWERS PER LINE, ANSWER OPTIONS 4 and 5 = SINGLE RESPONSE)

		Yes, with retailers or services providers located in (OUR COUNTRY)(M)	Yes, with retailers or services providers located in another EU country(M)	Yes, but you don't know in which country the retailers or services providers were located (DO NOT READ OUT)(N)	No	DK/N A
1	You have received a damaged product or a different product from the one you ordered (N)	1	2	3	4	5
2	Products were delivered later than promised (M)	1	2	3	4	5
3	Products were not delivered at all (M)	1	2	3	4	5

Items 2 and 3 FL 358 Q15. TREND MODIFIED
Item 1 NEW

2QU

ASK Q14b IF “SHOP ONLINE IN OUR COUNTRY ONLY”, ONLY CODE 1 in Q1

Q14 b I will read you some statements about problems consumers may have when shopping online. Please tell me whether you experienced any of them when buying in (OUR COUNTRY) during the last 12 months...?(M)

(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Yes	No	DK/N A
1	You have received a damaged product or a different product from the one you ordered (N)	1	2	3
2	Products were delivered later than promised (M)	1	2	3
3	Products were not delivered at all (M)	1	2	3

Items 2 and 3 FL 358 Q15. TREND MODIFIED
Item 1 NEW

0QU

ASK Q14c IF "SHOP ONLINE IN ANOTHER EU COUNTRY ONLY", ONLY CODE 2 in Q1

Q14c I will read you some statements about problems consumers may have when shopping online. Please tell me whether you experienced any of them when buying in another EU country during the last 12 months...?(M)
(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Yes	No	DK/N A
1	You have received a damaged product or a different product from the one you ordered (N)	1	2	3
2	Products were delivered later than promised (M)	1	2	3
3	Products were not delivered at all (M)	1	2	3

Items 2 and 3 FL 358 Q15. TREND MODIFIED

0QU

Item 1 NEW

ASK Q15 IF "SHOP ONLINE IN ANOTHER EU COUNTRY", CODE 2 in Q1

Q15 During the past 12 months, have you come across any of the following problems when buying goods and services online from another EU country?

(READ OUT – ROTATE/ OPTION 4 NO ROTATION – MULTIPLE ANSWERS POSSIBLE-
ANSWER OPTIONS 4 and 5 = SINGLE RESPONSE)

The retailer or service provider refused to deliver to (OUR COUNTRY)	1
The retailer or service provider did not accept payment from (OUR COUNTRY)	2
You were redirected to a website in (OUR COUNTRY) where the prices were different	3
None of them	4
DK/NA	5

NEW

1 QU

Q16 – SPLIT

ASK Q16a IF "Did buy product or service in another EU country" – CODE 2 in Q1 or CODE 1 in Q2

Q16a Now, I will read you some statements about problems consumers may have more generally when shopping. Please tell me whether you have experienced any of them during the last 12 months...?

(READ OUT – ROTATE – MULTIPLE ANSWERS PER LINE -ANSWER OPTIONS 4 and 5 = SINGLE RESPONSE))

		Yes, with retailers or services providers located in (OUR COUNTRY)(M)	Yes, with retailers or services providers located in another EU country(M)	Yes, but you don't know in which country the retailers or services providers were located (DO NOT READ OUT)(N)	No	DK/N A
1	You have encountered unfair terms and conditions in a contract (for instance, enabling the provider to change the contract terms unilaterally or imposing excessive penalties for breach of the contract)	1	2	3	4	5
2	You have had to pay unanticipated extra charges	1	2	3	4	5

NEW

1.5 QU

ASK Q16b IF "Did NOT buy product or service in another EU country" – NO CODE 2 in Q1 and NO CODE 1 in Q2

Q16b Now, I will read you some statements about problems consumers may have more generally when shopping. Please tell me whether you have experienced any of them when buying in (OUR COUNTRY) during the last 12 months...?

(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Yes	No	DK/NA
1	You have encountered unfair terms and conditions in a contract (for instance, enabling the provider to change the contract terms unilaterally or imposing excessive penalties for breach of the contract)	1	2	3
2	You have had to pay unanticipated extra charges	1	2	3

NEW

0 QU

ASK ALL

Q17 How strongly do you agree or disagree with each of the following statements?

(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Strongly agree	Agree	Disagree	Strongly disagree	DK/NA
1	You feel confident purchasing goods or services via the Internet from retailers or service providers in (OUR COUNTRY) (M)	1	2	3	4	5
2	You feel confident purchasing goods or services via the Internet from retailers or service providers in another EU country (M)	1	2	3	4	5

FL 332 Q16 TREND MODIFIED

1.5QU

ASK ALL

Q18 Which languages can you use comfortably for personal interests such as shopping, searching the web or other uses ?

(DO NOT READ OUT – MULTIPLE ANSWERS POSSIBLE)

Bulgarian	1
Czech	2
Croatian (N)	3
Danish	4
Dutch	5
English	6
Estonian	7
Finnish	8
French	9
German	10
Greek	11
Hungarian	12
Irish	13
Italian	14
Latvian	15
Lithuanian	16
Maltese	17
Polish	18
Portuguese	19
Romanian	20
Slovak	21
Slovenian	22
Spanish	23
Swedish	24
Icelandic	25
Norwegian	26
Luxembourgish	27
Russian	28
Other	29
DK/NA	30

NEW

1QU

ASK ALL

Q19 Thinking about your household's financial situation would you say that making ends meet every month is ...?

(READ OUT – ONE ANSWER ONLY)

Very difficult	1
Fairly difficult	2
Fairly easy	3
Very easy	4
DK/NA	5

NEW

1 QU

ASK ALL

Q20 Suppose that the exact same product is on sale in shop A and shop B. I will read you two statements about offers from shop A and shop B. In each case, please tell me which shop is cheaper.
(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Shop A	Shop B	DK/NA
1	Shop A offers a TV set for 440 euro. Shop B offers the exact same type of TV set at 500 euro, but with a discount of 10%.	1	2	3
2	Shop A offers a TV set for 890 euro. Shop B offers the exact same type of TV set at 940 euro, but with a reduction of 60 euro.	1	2	3

NEW

1.5 QU

Questionnaire
Retailers' attitudes towards cross-border trade and consumer protection
07/02/2014
Version after finalisation meeting

Target: Businesses employing 10 or more persons

Coverage: EU28 + Iceland + Norway

Total question units: 30 QU

DK = don't know/no answer – always spontaneous

(OUR COUNTRY) will be replaced by the name of the country in each country

(NATIONALITY) will be replaced by the nationality of the country in each country

Q1 is always the question about nationality

SPLIT BALLOT⁶³: needed

⁶³ A Split Ballot is a procedure where a sample is divided into two halves and each receives a slightly different questionnaire – ESOMAR definition

B SCREENERS

ASK ALL

B1 Does your company sell directly to final consumers?

Yes	1
No	2

Idem EB359 P1 **0QU**

IF 'NO', TERMINATE INTERVIEW.

ASK ALL

B2 How many employees do you have in your company?⁶⁴

[_____] employees	
DK/NA (DO NOT READ OUT)	999

Idem EB359 P2a **0QU**

IF LESS THAN 10 EMPLOYEES, TERMINATE INTERVIEW.

ASK ALL

B3 What exactly is your position in the company?
(DO NOT READ OUT - ONE ANSWER ONLY)

General manager	1
Commercial\Sales manager	2
Marketing manager	3
Other	4

Idem EB359 P3 **0QU**

⁶⁴ This question will be considered both as a screening question and as a socio-demographic question; therefore answers to this question will be included in the Volumes A, AA, AP, B and C and used on further analysis of survey results.

D DEMOS/BACKGROUND

ASK ALL

D1 What was your company turnover last year?

[] €

DK/NA (DO NOT READ OUT)

999

FL359 TREND D1

0QU

ASK ALL

D2 Besides (OUR COUNTRY), to which EU countries do you currently make cross-border sales to final consumers?

A “cross-border sale” is a sale to a final consumer resident in a different EU Member State from that of the seller. This does not include sales that are made in physical points of sale.

(DO NOT READ OUT – MULTIPLE ANSWERS POSSIBLE)

List of codes for EU countries [EXCLUDING COUNTRY OF INTERVIEW]

1-28

No other EU country besides (OUR COUNTRY)

99

DK/NA

999

NEW BASED ON FL359 D5

0QU

INTERVIEWER INSTRUCTION:

"selling in another language" means more than having a shop employee who can speak a few words of English with visiting tourists. It means e.g. having terms and conditions available in that language, user instructions/manual in that language, product catalogue, language version for the website...

ASK ALL

D3 In which languages do you sell to final consumers?

(DO NOT READ OUT – MULTIPLE ANSWERS POSSIBLE)

Bulgarian	1
Czech	2
Croatian	3
Danish	4
Dutch	5
English	6
Estonian	7
Finnish	8
French	9
German	10
Greek	11
Hungarian	12
Irish	13
Italian	14
Latvian	15
Lithuanian	16
Maltese	17
Polish	18
Portuguese	19
Romanian	20
Slovak	21
Slovenian	22
Spanish	23
Swedish	24
Icelandic	25

Norwegian	26
Luxembourgish	27
Russian	28
Other	29
DK/NA	30

TREND FL359 D4 **0QU**

ASK ALL

D4 Do you use the following sales channels for retail?
(READ OUT - MULTIPLE ANSWERS POSSIBLE)

E-commerce (M)	1
Mobile commerce (i.e. the buyer makes the purchase via special applications on mobile devices like smartphone or tablet) (N)	2
Telesales / call centre (e.g. phone sales, TV shopping) excluding e-commerce	3
Sales through representatives visiting consumers at their homes ⁶⁵	4
Direct retail sale (i.e. shops)	5
Mail order	6
Other (DO NOT READ OUT)	7
DK/NA (DO NOT READ OUT)	8

FL359 D2 TREND MODIFIED **0QU**

ASK IF "sells online and makes cross-border sales" (D4=1 or 2 AND D2 <>99)

D5a Please tell me which of the following statements apply to you:
(READ OUT – MULTIPLE ANSWERS POSSIBLE)

You sell online to final consumers in (OUR COUNTRY)	1
You sell online to final consumers in other EU countries	2
You sell online to final consumers in other non-EU countries	3
DK\NA (DO NOT READ OUT)	4

NEW **0QU**
Split ballot (D5b)

ASK IF "sells online but doesn't make cross-border sales" (D4=1 or 2 AND (D2 =99)

D5b Please tell me which of the following statements apply to you:
(READ OUT – MULTIPLE ANSWERS POSSIBLE)

You sell online to final consumers in (OUR COUNTRY)	1
You sell online to final consumers in other non-EU countries	3
DK/NA (DO NOT READ OUT)	4

NEW **0QU**
Split ballot (D5a)

ASK ALL

D6 Which of the following do you sell to final consumers?
By "food products" we mean: food that consumers can eat at home, take away or can eat on the spot.

⁶⁵ Please note that door to door sales are forbidden in Denmark and Luxembourg

(READ OUT – MULTIPLE ANSWERS POSSIBLE)

Food products	1
Non-food products	2
Services	3
Other (DO NOT READ OUT)	4
DK/NA (DO NOT READ OUT)	5

FL359 D3 TREND **0QU**

Q MAIN QUESTIONS

ASK IF "Company does not sell online" D4 <> 1 or 2

Q1a Would your company be interested in selling online in the next 12 months?
(READ OUT - ONE ANSWER ONLY)

Yes, only to consumers in (OUR COUNTRY)	1
Yes, only to consumers in other EU countries	2
Yes, to both consumers in (OUR COUNTRY) and in other EU countries	3
No	4
DK/NA (DO NOT READ OUT)	999

NEW **1QU**
Split ballot (Q1b)

ASK IF "Company does sell online" D4 = 1 or 2

Q1b Does your company plan to continue to sell online over the next 12 months?
(READ OUT - ONE ANSWER ONLY)

Yes, only to consumers in (OUR COUNTRY)	1
Yes, only to consumers in other EU countries	2
Yes, to both consumers in (OUR COUNTRY) and in other EU countries	3
No	4
DK/NA (DO NOT READ OUT)	999

NEW **0QU**
Split ballot (Q1a)

ASK ALL

Q2 Would you say that your company is confident to sell online?
(READ OUT - ONE ANSWER ONLY)

Yes, but only when selling to consumers in (OUR COUNTRY)	1
Yes, but only when selling to consumers in other EU countries	2
Yes, when selling to both consumers in (OUR COUNTRY) and in other EU countries	3
No	4
DK/NA (DO NOT READ OUT)	999

NEW **1QU**

ASK IF "Company does sell online" (D4 =1 or 2

Q3a How important are the following obstacles to the development of online sales to other EU countries by your company?

(READ OUT – ROTATE -ONE ANSWER PER LINE)

		Very important	Fairly important	Not very important	Not at all important	DK\NA (DO NOT READ OUT)
1	Differences in national tax regulations (e.g. VAT rules)	1	2	3	4	5
2	Differences in national consumer protection rules	1	2	3	4	5
3	Differences in national contract law	1	2	3	4	5
4	Higher costs of cross-border delivery compared to domestic delivery	1	2	3	4	5
5	Potentially higher costs involved in resolving complaints and disputes cross-border	1	2	3	4	5
6	Higher risk of fraud and non-payments in cross border sales	1	2	3	4	5
7	Extra costs arising from language differences	1	2	3	4	5
8	Extra costs from after-sales service in cross-border transactions	1	2	3	4	5
9	Restrictions on cross-border sales imposed by manufacturers or suppliers	1	2	3	4	5
10	Higher transport costs due to geographic distance (M)	1	2	3	4	5

NEW, based on FL359 Q1

5.5QU

Question modified; items 4,5,7,8,9 identical to FL359 Q1

Split ballot (Q3b)

ASK IF "Company does not sell online" D4 <>1 or 2

Q3b How important are the following obstacles to the development of online sales by your company?

(READ OUT – ROTATE - ONE ANSWER PER LINE)

		Very important	Fairly important	Not very important	Not at all important	DK\NA (DO NOT READ OUT)
1	Additional consumer protection rules	1	2	3	4	5
2	Higher costs of delivery	1	2	3	4	5
3	Potentially higher costs involved in resolving complaints and disputes online	1	2	3	4	5
4	Higher risk of fraud and non-payment	1	2	3	4	5
5	Extra costs from after-sales	1	2	3	4	5

	service					
6	Extra need for IT skills	1	2	3	4	5
7	Extra need for capital for investment in development of IT applications	1	2	3	4	5
8	The nature of your business	1	2	3	4	5

NEW

0 QU

Split ballot (Q3a)

ASK IF NON-FOOD PRODUCTS RETAILER, CODE 2 in D6

Q4 "Product safety" relates to consumer products only and does not include industrial products. Unsafe products are those which fail to comply with safety standards. Here we are not talking for example about rifles or knives. Thinking about all non-food products currently available in your market in (OUR COUNTRY), do you think that ...?
(READ OUT - ONE ANSWER ONLY)

Essentially all non-food products are safe	1
A small number of non-food products are unsafe	2
A significant number of non-food products are unsafe	3
DK/NA (DO NOT READ OUT)	999

FL359 Q11 TREND

1QU

ASK ALL

Q5 Imagine that a consumer bought a durable good new 18 months ago and it breaks down without any fault on his part. He didn't buy or benefit from any extended commercial guarantee. Does he have the right to have it repaired or replaced for free?
(READ OUT - ONE ANSWER ONLY)

Yes	1
No	2
It depends on the product	3
DK/NA (DO NOT READ OUT)	999

NEW , replaces EB359 Q6a,b,c

1QU

ASK ALL

Q6 I will read 4 statements concerning legislation in (OUR COUNTRY) related to commercial practices. Some of them are prohibited and some are not. For each statement, please tell me if you think it is prohibited or not?
(READ OUT – ROTATE - ONE ANSWER PER LINE)

		Prohibited	Not prohibited	DK\NA (DO NOT READ OUT)
1	To include an invoice or a similar document seeking payment in marketing material			
2	To run a promotional campaign stating "We offer a discount of 60%" although the products offered with a 60% discount are almost out of stock			
3	To promote products for children by directly targeting the parents in the advertisements			
4	To describe a product as "free" although it is only available free of charge to customers calling a premium rate phone number			

Items 1 and 4 –FL359 Q7.1, Q7.4 TREND

2.5QU

Item 2 - FL359 Q7.2 TREND STRONGLY MODIFIED (“To advertise products at a very low price compared to other offers without having a reasonable quantity of products for sale

Item 3 - NEW

ASK IF Company does sell in other EU countries (D2 <>99)

Q7a Please tell me if you have come across any of the following unfair commercial practices by your competitors in the last 12 months:

(READ OUT – ROTATE except item 6, always last– MAX 2 ANSWERS PER LINE, only the 2 ‘Yes’ options can be chosen simultaneously – ‘No’ and ‘DK/NA’ are exclusive)

		Yes, in (OUR COUNTRY)	Yes, in another EU country	No	DK\NA (DO NOT READ OUT)
1	Offering products as free of charge even if they actually entail substantial charges				
2	Pressuring consumers with persistent commercial calls or messages				
3	Advertising falsely that a product is available only for a limited period				
4	Writing fake reviews which are in fact hidden adverts or hidden attacks on competitors				
5	Sending unsolicited products to consumers, asking them to pay for the products				
6	Other unfair commercial practices				

NEW – replaces FL359 Q8-Q9

3.5QU

Split ballot (Q7b)

ASK IF Company does NOT sell in other EU countries (D2 =99)

Q7b Please tell me if you have come across any of the following unfair commercial practices by your competitors in (OUR COUNTRY) in the last 12 months:

(READ OUT – ROTATE except item 6, always last – ONE ANSWER PER LINE)

		Yes	No	DK\NA (DO NOT READ OUT)
1	Offering products as free of charge even if they actually entail substantial charges			
2	Pressuring consumers with persistent commercial calls or messages			
3	Advertising falsely that a product is available only for a limited period			
4	Writing fake reviews which are in fact hidden adverts or hidden attacks on competitors			
5	Sending unsolicited products to consumers, asking them to pay for the products			
6	Other unfair commercial practices			

NEW – replaces FL359 Q8-Q9

0QU

Split ballot (Q7a)

ASK ALL – ASK ITEM 5 ONLY IF RETAILER SELLS NON-FOOD PRODUCTS, CODE 2 in D6

Q8 Please tell me whether you strongly agree, agree, disagree, or strongly disagree with each of the

following statements. In (OUR COUNTRY):
(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Strongly agree	Agree	Disagree	Strongly disagree	DK\NA (DO NOT READ OUT)
1	The public authorities actively monitor and ensure compliance with consumer legislation in your sector					
2	Consumer NGOs actively monitor compliance with consumer legislation in your sector					
3	The self-regulatory bodies actively monitor respect of codes of conduct or codes of practice in your sector					
4	The media regularly report on businesses which do not respect consumer legislation in your sector					
5	The public authorities actively monitor and ensure compliance with product safety legislation in your sector					

FL359 Q14.1, Q14.4, Q14.5, Q14.6 TREND SLIGHTLY MODIFIED

3QU

ASK ALL

Q9 With regard to product safety, please tell me whether any of the following has taken place in your sector in the last 24 months:
(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Yes	No	DK\NA (DO NOT READ OUT)
1	The public authorities have asked for the withdrawal or recall of products			
2	The public authorities issued public warnings about the safety of products			

BASED ON FL359 Q13.3, Q13.4 (but were focused on respondent's company and not in their sector)

1.5QU

No trend, but reference to results from FL359

ASK ALL

Q10 I will read you three statements about compliance with consumer legislation in (OUR COUNTRY). Please tell me whether you strongly agree, agree, disagree, or strongly disagree with each of them:
(M)
(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Strongly agree	Agree	Disagree	Strongly disagree	DK\NA (DO NOT READ OUT)
1	Your competitors comply with consumer legislation					
2	It is easy to comply with consumer legislation in your sector (N)					
3	The costs of compliance with consumer legislation in your sector are reasonable (N)					

FL359 TREND MODIFIED (split between “in OUR COUNTRY” and “in

2QU

other EU countries”) No trend, but reference to results from FL359

Item 1 - FL359 Q3.2

Item 2 and 3 - NEW

ASK IF Company does sell in other EU countries (D2 <>99)

Q11 I will read you similar statements about compliance with consumer legislation in other EU countries. Please tell me whether you strongly agree, agree, disagree, or strongly disagree with each of them:
(READ OUT – ROTATE – ONE ANSWER PER LINE)

		Strongly agree	Agree	Disagree	Strongly disagree	DK\NA (DO NOT READ OUT)
1	Companies competing with you in other EU countries comply with consumer legislation					
2	It is easy to comply with consumer legislation in your sector in other EU countries					
3	The costs related to compliance with consumer legislation in the sector are reasonable in other EU countries					

FL359 BASED ON Q3 (split between “in OUR COUNTRY” and “in other EU countries”) No trend, but reference to results from FL359

2QU

ASK ALL

Q12 Please tell me whether you strongly agree, agree, disagree, or strongly disagree with the following statement
(READ OUT – ONE ANSWER ONLY)

	Strongly agree	Agree	Disagree	Strongly disagree	DK\NA (DO NOT READ OUT)
Most environmental claims about goods or services in your sector in (OUR COUNTRY) are reliable					

NEW

1QU

ASK ALL EXCEPT FINLAND AND SWEDEN

Q13a Do you know any Alternative Dispute Resolution (ADR) bodies (i.e. arbitrators, mediators, ombudsmen or other out-of-court dispute resolution bodies) for settling disputes with consumers in (OUR COUNTRY)?
(READ OUT - ONE ANSWER ONLY)

Yes, and you are willing or obliged to use them	1
Yes, but you are not willing to use them	2
Yes, but those ADR bodies do not cover disputes concerning your business	3
No	4
DK/NA (DO NOT READ OUT)	999

Idem EB359 Q15a TREND MODIFIED - Possible to compare the ‘Yes’ vs. the ‘No’

1QU

Split ballot (Q13b-Q13c)

ASK FINLAND ONLY

Q13 Do you know any Alternative Dispute Resolution (ADR) bodies (i.e. Consumer Disputes

- b Boards, arbitrators, mediators, ombudsmen, conciliation bodies, consumer complaints boards or other out-of-court dispute resolution bodies) for settling disputes with consumers in (OUR COUNTRY)?**
(READ OUT - ONE ANSWER ONLY)
- | | |
|--|-----|
| Yes, and you are willing or obliged to use them | 1 |
| Yes, but you are not willing to use them | 2 |
| Yes, but those ADR bodies do not cover disputes concerning your business | 3 |
| No | 4 |
| DK/NA (DO NOT READ OUT) | 999 |
- Idem EB359 Q15b TREND MODIFIED- Possible to compare the 'Yes' vs. the 'No'** **0QU**
Split ballot (Q13a-Q13c)

ASK SWEDEN ONLY

- Q13c Do you know any out-of-court dispute resolution bodies (i.e. "Allmänna reklamationsnämnden", arbitrators, mediators, ombudsmen, conciliation bodies, or consumer dispute boards) for settling disputes with consumers in (OUR COUNTRY)?**
(READ OUT - ONE ANSWER ONLY)
- | | |
|--|-----|
| Yes, and your industry is covered by the public system for consumer dispute resolution | 1 |
| Yes, and your industry has its own dispute resolution body | 2 |
| No | 3 |
| DK/NA (DO NOT READ OUT) | 999 |
- Trend EB359 Q15c** **0QU**
Split ballot (Q13a-Q13b)

ASK ALL EXCEPT FINLAND AND SWEDEN

- Q14a During the past 12 months, has your company received complaints from consumers located in (OUR COUNTRY)?**
(READ OUT – ROTATE - MULTIPLE ANSWERS POSSIBLE)
- | | |
|---|---|
| Yes, through in-house customer services | 1 |
| Yes, through non-governmental consumer organizations | 2 |
| Yes, through public authorities | 3 |
| Yes, through alternative dispute resolution bodies (such as ombudsmen, consumer complaints board, arbitrators, mediators, or other out-of-court bodies) | 4 |
| Yes, through courts | 5 |
| Yes, through other channels | 6 |
| Has not received any complaints (DO NOT READ OUT) | 7 |
| DK/NA (DO NOT READ OUT) | 8 |
- NEW** **1QU**
Split ballot (Q14b-Q14c)

ASK FINLAND ONLY

- Q14b During the past 12 months, has your company received complaints from consumers located in (OUR COUNTRY)?**
(READ OUT – ROTATE - MULTIPLE ANSWERS POSSIBLE)
- | | |
|--|---|
| Yes, through in-house customer services | 1 |
| Yes, through non-governmental consumer organizations | 2 |
| Yes, through public authorities | 3 |

Yes, through alternative dispute resolution bodies (such as Consumer Disputes Boards, arbitrators, mediators, ombudsmen, conciliation bodies, consumer complaints boards, other out-of-court dispute resolution bodies)	4
Yes, through courts	5
Yes, through other channels	6
Has not received any complaints (DO NOT READ OUT)	7
DK/NA (DO NOT READ OUT)	8

NEW Split ballot (Q14a-Q14c) 0QU

ASK SWEDEN ONLY

Q14c During the past 12 months, has your company received complaints from consumers located in (OUR COUNTRY)?
(READ OUT – ROTATE - MULTIPLE ANSWERS POSSIBLE)

Yes, through in-house customer services	1
Yes, through non-governmental consumer organizations	2
Yes, through public authorities	3
Yes, through alternative dispute resolution bodies (such as arbitrators, mediators, ombudsmen, conciliation bodies, consumer dispute boards, other out-of-court dispute resolution bodies)	4
Yes, through courts	5
Yes, through other channels	6
Has not received any complaints (DO NOT READ OUT)	7
DK/NA (DO NOT READ OUT)	8

NEW Split ballot (Q14a-Q14b) 0QU

ASK IF D2 <>99

Q15 During the past 12 months, has your company received complaints from consumers located in other EU countries?
(READ OUT – ROTATE - MULTIPLE ANSWERS POSSIBLE)

Yes, through in-house customer services	1
Yes, through European Consumer Centres	2
Yes, through non-governmental consumer organizations	3
Yes, through public authorities	4
Yes, through alternative dispute resolution bodies (such as ombudsmen, consumer complaints board, arbitrators, mediators, or other out-of-court bodies)	5
Yes, through the European Small Claims Procedure	6
Yes, through courts (other than the through the European Small Claims Procedure)	7
Yes, through other channels	8
Has not received any complaints (DO NOT READ OUT)	9
DK/NA (DO NOT READ OUT)	10

NEW 1QU

ASK ONLY TO RETAILERS WHO HAVE RECEIVED COMPLAINTS FROM CONSUMERS LOCATED IN THEIR OWN COUNTRY (Q14 <>7, 8)

Q16 What type of complaints has your company received from consumers located in (OUR COUNTRY) during the past 12 months? Were they complaints...
(READ OUT – ROTATE – MULTIPLE ANSWERS POSSIBLE)

about the product itself	1
about late or no delivery	2
about contractual terms	3

about extra charges	4
about safety of products	5
about remedies offered by the company following a complaint	6
Other	7
DK/NA (DO NOT READ OUT)	8

NEW

1QU

ASK ONLY TO RETAILERS SELLING TO OTHER EU COUNTRIES AND WHO HAVE RECEIVED COMPLAINTS FROM CONSUMERS LOCATED IN OTHER EU COUNTRIES

(D2 <>99 AND Q15<>9,10)

Q17 What type of complaints has your company received from consumers located in other EU countries during the past 12 months? Were they complaints...
(READ OUT – ROTATE – MULTIPLE ANSWERS POSSIBLE)

about the product itself	1
about late or no delivery	2
about contractual terms	3
about extra charges	4
about safety of products	5
about remedies offered by the company following a complaint	6
Other	7
DK/NA (DO NOT READ OUT)	8

NEW

1QU

Table 65 EC survey of consumers

Question Number	Question	Most similar item in EB 358	Filter	Adjustment from EB 358	Core/ Module
(1)	(2)	(3)	(4)	(5)	(6)
Socio-demographic characteristics					
D01	What is your nationality? (EB358 Screener)		Asked to all	No change	Core
D1	How old are you? (EB358 D1)		Asked to all	No change	Core
D2	Gender (EB358 D2)		Asked to all	No change	Core
D4	How old were you when you stopped full-time education? (EB 358 D4)		Asked to all	No change	Core
D5	As far as your current occupation is concerned, would you say you are self-employed, an employee, a manual worker or would you say you are without a professional activity? Does it mean you are a(n) ... [<i>options follow</i>] (EB358 D5)		Asked to all	No change	Core
D6	How often do you use internet for private purposes? 1. <i>Every day or almost every day</i> 2. <i>At least once a week (but not every day)</i> 3. <i>At least once a month (but not every week)</i> 4. <i>Less than once a month</i> 5. <i>Hardly ever</i> 6. <i>Never</i>	Do you have an internet connection at home? <i>Yes/ No</i> (EB 358 D6)	Asked to all	Changed to frequency of use	Core
D12	In which region do you currently live in? (EB358 D12)		Asked to all	No change	Core
D13	Would you say you live in a ... ? 1. <i>Rural area or village</i> 2. <i>Small or middle size town</i> 3. <i>Large town</i> (EB358 D13)		Asked to all	No change	Core
D18	Have you got a mobile phone ? <i>Yes/ No</i> (EB358 D18)		Asked to all	No change	Core
D20	Have you got a landline phone? <i>Yes/ No</i> (EB358 D20)		Asked to all	No change	Core

Q1	<p>In the past 12 months, have you purchased any goods or services via the internet in [OUR COUNTRY] or elsewhere in any of the following ways ...?</p> <p>1. <i>Yes, from a retailer/ service provider located in [OUR COUNTRY]</i> 2. <i>Yes, from a retailer/ service provider located in another EU country</i> 3. <i>Yes, from a retailer/ service provider located outside the EU</i> 4. <i>No</i> 5. <i>Yes, you purchased online but do not know where the retailer/ service provider is located (DO NOT READ OUT)</i></p>	<p>In the past 12 months, have you purchased any goods or services via the internet (website, email etc..) in [OUR COUNTRY] or elsewhere in any of the following ways ...?</p> <p>1. <i>Yes, from a retailer/ service provider located in [OUR COUNTRY]</i> 2. <i>Yes, from a retailer/ service provider located in another EU country</i> 3. <i>Yes, from a retailer/ service provider located outside the EU</i> 4. <i>No</i> (EB358 Q14)</p>	Asked to consumers who use internet	One new option added	Core
Q2	<p>In the past 12 months, have you purchased any goods or services through channels other than the internet from a retailer/ service provider located in another EU country ? <i>Yes/ No</i></p>		Asked to all	New question	Core
Q18	<p>Which languages can you use comfortably for personal interests (such as shopping, searching the web or other uses) ? <i>List of 29 languages</i></p>		Asked to all	New question	Module
Q19	<p>Would you say that making ends meet every month for you ...?</p> <p>1. <i>Very difficult</i> 2. <i>Fairly difficult</i> 3. <i>Fairly easy</i> 4. <i>Very easy</i></p>		Asked to all	New question	Module

Q20	<p>Suppose that the exact same product is on the sale in shop A and shop B. The two shops are next to each other. I will read you two statements about offers from shop A and shop B. In each case, please tell me which one is cheaper?</p> <p>1. <i>Shop A offers a TV set for 440 euro. Shop B, next door, offers the exact same type of TV set at 500 euro, but with a discount of 10%</i></p> <p>2. <i>Shop A offers a TV set for 890 euro. Shop B, next door, offers the exact same type of TV at 940 euro, but with a reduction of 60 euro.</i></p>		Asked to all	New question	Module
Knowledge, Awareness, Trust					
Q3	<p>How strongly do you agree or disagree with each of the following statements in [OUR COUNTRY] ...</p> <p>1. <i>You trust public authorities to protect your rights as a consumer</i></p> <p>2. <i>In general, retailers / service providers respect your rights as a consumer</i></p> <p>3. <i>You trust that non-governmental consumer organisations protect your rights as a consumer</i></p> <p>4. <i>It is easy to settle disputes with retailers/ service providers through an out of court body (i.e. arbitration, mediation or conciliatory body)</i></p> <p>5. <i>It is easy to settled disputes with retailers/ service providers through the courts</i></p> <p>6. <i>Most environmental claims related to goods and services in [OUR COUNTRY] are accurate</i></p> <p>(Scale: Strongly Agree to Strongly Disagree)</p>	<p>How strongly do you agree or disagree with each of the following statements in [OUR COUNTRY] ...</p> <p>1. <i>You trust independent consumer organisations to protect your rights as a consumer</i></p> <p>2. <i>You trust public authorities to protect your rights as a consumer</i></p> <p>3. <i>You feel that you are adequately protected by existing measures to protect consumers</i></p> <p>4. <i>In general, retailers/ providers respect your rights as a consumer</i></p> <p>5. <i>It is easy to settle disputes with retailers/ providers through an out of court body (arbitration, mediation or conciliation body)</i></p> <p>6. <i>It is easy to settle disputes with retailers/ providers through the courts</i></p> <p>7. <i>You have changed your consumer behavior as a result of a media story (e.g. changed shop or product)</i></p> <p>(Scale: Strongly Agree to Strongly Disagree) (EB358 Q1)</p>	Asked to all	Options 1,2,4,5 the same, option 2 changed, and option 6 new	Core

Q4	Thinking about all non-food products currently on the market in [OUR COUNTRY], do you think that ...? <i>1. Essentially all non-food products are safe</i> <i>2. A small number of non-food products are unsafe</i> <i>3. A significant number of non-food products are unsafe</i> <i>4. It depends on the product</i> (EB358 Q2)		Asked to all	No change	Core
Q5	Considering everything you bought during the last two weeks, did the environmental impact of any goods and services also influence your choice? <i>1. Yes, for all or most goods or services you bought</i> <i>2. Yes, but only for some</i> <i>3. Yes, but only for one or two</i> <i>4. No</i>	Considering everything you bought during the last two weeks, did the environmental impact of any goods and services also influence your choice? <i>1. Yes</i> <i>2. No</i> (EB358 Q4)	Asked to all	Options changed	Core
Q6	Suppose you ordered a new electronic product by post, phone or the internet, do you think you have the right to return the product you ordered 4 days after their delivery and get your money back, without giving any reason? <i>1. Yes</i> <i>2. No</i> <i>3. It depends on the product</i>	Suppose you ordered goods by post, phone or the internet, do you think you have the right to return the goods you ordered 4 days after their delivery and get your money back, without giving any reason? <i>1. Yes</i> <i>2. No</i> (EB358 Q6)	Asked to all	Questions changed to a specific product. New option added.	Core
Q7	Imagine that a new electronic product you bought 18 months ago breaks down without any fault on your part. You did not buy or benefit from any external commercial guarantee. Do you have the right to have it repaired or replaced for free? <i>1. Yes</i> <i>2. No</i> <i>3. It depends on the product</i>	Imagine a new fridge you bought 18 months ago breaks down without any fault on your part. You didn't buy or benefit from any extended commercial guarantee. Do you have the right to have it repaired or replaced for free? <i>1. Yes</i> <i>2. No</i> (EB358 Q7)	Asked to all	Question slightly changed. New option added.	Core

Q8	<p>Imagine you receive two educational DVDs by post that you have not ordered, together with a 20 euro invoice for the goods. Are you obliged to pay the invoice ?</p> <p>1. No, and you are not obliged to return the DVDs 2. No, provided that you return the DVDs 3. Yes, you are obliged to pay (EB38 Q8)</p>	Asked to all	No change	Core
Q17	<p>How strongly do you agree or disagree with the following statements?</p> <p>1. You feel confident purchasing goods or services via the internet from retailers/ service providers in [OUR COUNTRY] 2. You feel confident purchasing goods or services via the internet from retailers/ service providers in another EU country (Scale: Strongly Agree to Strongly Disagree) (EB358 Q16)</p>	Asked to all	No change	Core

Compliance and Enforcement					
Q13a	<p>I will read you some statements about unfair commercial practices. After each one, please tell me whether you experienced it with retailers from [OUR COUNRTY] or in another EU country. During the last year ...</p> <p>Options:</p> <ol style="list-style-type: none"> <i>You were informed you won a lottery you did not know about, but you were asked to pay some money in order to collect the prize</i> <i>You felt pressured by persistent sales calls or messages urging you to buy something or sign a contract</i> <i>You were offered a product advertised as free of charge which actually implied charges</i> <i>You came across advertisements that the product is available only for a very limited period of time but you finally realized that it was not the case</i> <i>You came across any other unfair commercial practices</i> <p>Answer choices:</p> <ol style="list-style-type: none"> <i>Yes, from retailer located in [OUR COUNTRY]</i> <i>Yes, from retailers located in another EU country</i> <i>No</i> 	<p>Have any of the following happened to you in the past 12 months?</p> <ol style="list-style-type: none"> <i>You came across misleading or deceptive advertisements, statements or offers. Misleading or deceptive advertisements are those which contain false information or present factually correct information in a misleading manner about goods or services on sale</i> <i>You bought something based on an advertisement or offer that turned out to be misleading or deceptive</i> <i>You came across fraudulent advertisements, statements or offers. Fraudulent advertisements actually attempt to obtain money without selling anything, for example a lottery scam.</i> <i>You bought something based on an advertisement or offer that turned out to be fraudulent</i> 	<p>Asked to consumers who did buy product or service from another EU country.</p>	New question	Core
Q13b	<p>I will read you some statements about unfair commercial practices. After each one, please tell me whether you experienced it with retailers from [OUR COUNRTY]. During the last year ...</p> <p><i>Same options as in Q13b</i></p> <p>Answer choices: 1. Yes, 2. No</p>	<p>Answer choices: 1. Yes, 2.No (EB358 Q19)</p>	<p>Asked to consumers who did not buy from another EU country.</p>	New question	Core

Q14a	<p>I will read you some statements about problems consumers may have when shopping online. Please tell me whether you experienced any of them when buying in [OUR COUNTRY] or in another EU country during the last year?</p> <p>Options: <i>1. You received a damaged product or a different product from the one you ordered</i> <i>2. Products were delivered too late</i> <i>3. Products were not delivered at all</i></p> <p>Answer choices: <i>1. Yes, when buying from [OUR COUNTRY]</i> <i>2. Yes, when buying in another EU country</i> <i>3. No</i></p>	<p>During the past 12 months have any of the following situations happened to you when purchasing something via the internet in [OUR COUNTRY] or in another EU country?</p> <p><i>1. A delay in delivery of something purchased from a retailer/ provider located in [OUR COUNTRY]</i> <i>2. You purchased something from a retailer/ provider located in [OUR COUNTRY] and it was not delivered</i> <i>3. A delay in the delivery of something purchased from a retailer/ provider located in another EU country</i> <i>4. You purchased something from a retailer/ provider located in another EU country and it was not delivered</i> <i>5. You wanted to purchase something from a retailer/ provider in another EU country but the retailer did not deliver or sell to [OUR COUNTRY]</i> (EB358 Q15)</p>	<p>Asked to consumers who shopped online in OUR COUNTRY and in another EU country</p>	<p>Question rephrased. Options and answer choices changed. Option 1 new.</p>	Core
Q14b	<p>I will read you some statements about problems consumers may have when shopping online. Please tell me whether you experienced any of them when buying in [OUR COUNTRY] during the last year?</p> <p><i>Same options as Q14a</i> Answer choices: <i>1. Yes, 2. No</i></p>		<p>Asked to consumers who shopped online in OUR COUNTRY only.</p>	<p>Question rephrased. Options and answer choices changed. Option 1 new.</p>	Core
Q14c	<p>I will read you some statements about problems consumers may have when shopping online. Please tell me whether you experienced any of them when buying in another EU country during the last year?</p> <p><i>Same options as Q14a</i> Answer choices: <i>1. Yes, 2. No</i></p>		<p>Asked to consumers who shopped online in another EU country only.</p>	<p>Question rephrased. Options and answer choices changed. Option 1 new.</p>	Core

Q15	<p>During the past 12 months, did you come across any of the following problems when buying goods and services online from another EU country?</p> <p>1. <i>The retailer or service provider refused to deliver to [OUR COUNTRY]</i> 2. <i>The retailers or service provider did not accept the payment from [OUR COUNTRY]</i> 3. <i>You were redirected to a website in [OUR COUNTRY] where the prices were different</i></p>	Option 5 of Q15 in EB 358 (above)	Asked to consumers who shopped online in another EU country.	New question. Option 2 similar to a previous question in EB 358, and options 2 and 3 new.	Core
Q16a	<p>Now, I will read you some statements about problems consumers may have more generally when shopping. Please tell me whether you experienced any of them when buying in [OUR COUNTRY] or in another EU country during the last year?</p> <p>Options: 1. <i>You encountered unfair terms and conditions in a contract (for instance, enabling the provider to change the contract terms unilaterally or imposing excessive penalties for breach of the contract)</i> 2. <i>You had to pay unanticipated extra charges</i></p> <p>Answer choices: 1. <i>Yes, when buying in my country</i> 2. <i>Yes, when buying in another EU country</i> 3. <i>No</i></p>		Asked to consumers who shopped online in OUR COUNTRY and in another EU country	New question	Core

Q16b	<p>Now, I will read you some statements about problems consumers may have more generally when shopping. Please tell me whether you experienced any of them when buying in [OUR COUNTRY] during the last year?</p> <p>Same options as in Q16a</p> <p>Answer choices: <i>1. Yes, 2. No</i></p>		<p>Asked to consumers who shopped online in OUR COUNTRY only.</p>	New question	Core
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Complaints and Dispute Resolution					
Q9	<p>In the past 12 months, did you experience any problem when buying or using any goods or services in [OUR COUNTRY] where you thought you had a legitimate cause for complaint?</p> <p><i>1. Yes, and you took action to solve the problem(s)</i> <i>2. Yes, but you did not do anything</i> <i>3. No</i></p>	<p>In the past 12 months, have you had legitimate cause for complaint when buying or using any goods or services in [OUR COUNTRY]?</p> <p><i>1. Yes, and you took action to solve the problem(s)</i> <i>2. Yes, but you did not do anything</i> <i>3. No</i> [EB358 Q10]</p>	Asked to all	Question slightly rephrased	Core
Q10	<p>And what did you do?</p> <p><i>1. You complained about it to the retailer/ service provider</i> <i>2. You complained about it to the manufacturer</i> <i>3. You complained about it to a public authority</i> <i>4. You brought the matter to an out-of-court dispute resolution body (ADR) such as an ombudsman, arbitration, mediation or conciliation body</i> <i>5. You took the business concerned to Court</i> <i>6. Other</i> [EB358 Q11]</p>		Asked to consumers who had a problem and complained	No change	Core

Q11	<p>In general, how satisfied or dissatisfied were you with the way your complaint(s) was (were) dealt with by the?</p> <p>Options:</p> <ol style="list-style-type: none"> 1. <i>Retailer/ service provider</i> 2. <i>Manufacturer</i> 3. <i>Public authority</i> 4. <i>An out-of-court dispute resolution body (ADR)</i> 5. <i>Court</i> <p>Answer choices:</p> <ol style="list-style-type: none"> 1. <i>Very satisfied</i> 2. <i>Fairly satisfied</i> 3. <i>Not very satisfied</i> 4. <i>Not at all satisfied</i> <p>(EB358 Q12)</p>		Asked to consumers who had a problem and complained	No change	Core
Q12	<p>What were the main reasons why you did not take any action?</p> <ol style="list-style-type: none"> 1. <i>You were unlikely to get a satisfactory solution to the problem you encountered</i> 2. <i>The sums involved were too small</i> 3. <i>You did not know or where to complain</i> 4. <i>You were not sure of your rights as a consumer</i> 5. <i>You thought it would take too long</i> 6. <i>You tried to complain about other problems in the past but were not successful</i> 7. <i>You thought complaining would have led to a confrontation, and you did not feel at ease in such situations</i> 8. <i>Other</i> 	<p>What were the main reasons why you did not take any action?</p> <ol style="list-style-type: none"> 1. <i>You were unlikely to get a satisfactory solution to the problem you encountered</i> 2. <i>The sums involved were too small</i> 3. <i>You did not know or where to complain</i> 4. <i>You were not sure of your rights as a consumer</i> 5. <i>You thought it would take too long</i> 6. <i>You tried to complain about other problems in the past but were not successful</i> 7. <i>Other</i> <p>(EB358 Q13)</p>	Asked to consumers who had a problem and did take any action	A new option (7) added	Core

Table 66 EC survey of retailers

Question Number	Question	Most similar item in EB 358	Filter	Adjustment from EB 358	Core/ Module
(1)	(2)	(3)	(4)	(5)	(6)
Socio-demographic characteristics					
B1	Does your company sell directly to final consumers? <i>1. Yes</i> <i>2. No</i> (EB359 B1)		Screener	No change	Core
B2a	How many employees do you have in your company? (EB 359 B2a)		Screener	No change	Core
B2b	Does your company have ... <i>1. Less than 10 employees</i> <i>2. 10 to 49 employees</i> <i>3. 50 to 249 employees</i> <i>4. 250 employees or more</i>		Asked to respondents who do not know the exact number of employees	New question	Core
B3	What exactly is your position in the company ? <i>1. General manager</i> <i>2. Commercial / Sales manager</i> <i>3. Marketing manager</i> <i>4. Other</i> (EB359 B3)		Asked to all	No change	Core
D1	What was your company turnover last year ? (EB359 D1)		Asked to all	No change	Core

D2	<p>Besides [OUR COUNTRY], to which EU countries do you currently make cross-border sales to final consumers?</p> <p><i>List of codes for EU countries</i> <i>No other EU country [OUR COUNTRY]</i></p>	<p>To how many EU countries do you currently make cross-border sales to final consumers?</p> <p><i>You sell only to consumers in your own country</i> <i>___ Country(ies) (0/26 other EU countries)</i> (EB359 D5)</p>	Asked to all	Question rephrased to reflect countries	Core
D3	<p>In which language do you sell to final consumers?</p> <p><i>List of 29 languages (including Other)</i> (EB359 D4)</p>		Asked to all	No change	Core
D4	<p>Do you use the following sales channels for retail?</p> <p>Multiple choice: 1. <i>E-commerce</i> 2. <i>Mobile commerce (i.e. the buyer makes the purchase via special applications on mobile devices like smartphone or tablet)</i> 3. <i>Telesales / call centre (excluding e-commerce, e.g. phone sales, TV shopping)</i> 4. <i>Sales representatives visiting consumers at their homes</i> 5. <i>Direct retail sales(i.e. shop)</i> 6. <i>Other</i></p>	<p>Do you use the following sales channels for retail?</p> <p>Multiple choice: 1. <i>E-commerce/ Internet</i> 2. <i>Mail order (by post)</i> 3. <i>Telesales / call center (excluding e-commerce, e.g. phone sales, TV shopping)</i> 4. <i>Sales through representatives visiting consumers at their homes</i> 5. <i>Direct retail sale (i.e. shops)</i> 6. <i>Other</i> (EB359 D2)</p>	Asked to all	Options 1 and 2 rephrased	Core
D5a	<p>Please tell me which of the following statements apply to you?</p> <p>Multiple choice: 1. <i>You sell online to final consumers in [OUR COUNTRY]</i> 2. <i>You sell online to final consumers in other EU countries</i> 3. <i>You sell online to final consumers in other non-</i></p>		Asked to retailers which sell online and cross-border within the EU	New question	Core

	<i>EU countries</i>				
D5b	<p>Please tell me which of the following statements apply to you?</p> <p>Multiple choice:</p> <p>1. <i>You sell online to final consumers in [OUR COUNTRY]</i></p> <p>2. <i>You sell online to final consumers in other non-EU countries</i></p>		<p>Asked to retailers which sell online and cross-border to non-EU countries</p>	New question	Core
D6	<p>Which of the following do you sell to final consumers?</p> <p>Multiple choice:</p> <p>1. <i>Food products</i></p> <p>2. <i>Non-food products</i></p> <p>3. <i>Services</i></p> <p>4. <i>Other</i></p> <p>(EB359 D6)</p>		<p>Asked to all</p>	No change	Core

Knowledge, Awareness, Trust					
Q1a	<p>Would your company be interested in selling online in the next 12 months?</p> <p><i>1. Yes, only to consumers in [OUR COUNTRY]</i> <i>2. Yes, only to consumers in other EU countries</i> <i>3. Yes, to both consumers in [OUR COUNTRY] and in other EU countries</i> <i>4. No</i></p>		Asked to retailers which do not sell online	New question	Core
Q1b	<p>Does your company plan to continue to sell online over the next 12 months?</p> <p><i>1. Yes, only to consumers in [OUR COUNTRY]</i> <i>2. Yes, only to consumers in other EU countries</i> <i>3. Yes, to both consumers in [OUR COUNTRY] and in other EU countries</i> <i>4. No</i></p>		Asked to retailers which do sell online	New question	Core
Q2	<p>Would you say that your company is confident to sell online?</p> <p><i>1. Yes, but only when selling to consumers in [OUR COUNTRY]</i> <i>2. Yes, but only when selling to consumers in other EU countries</i> <i>3. Yes, when selling to both consumers in [OUR COUNTRY] and in other EU countries</i> <i>4. No</i></p>		Asked to all	New question	Core

Q3a	<p>How important are the following obstacles to the development of online sales to other EU countries by your company?</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> <i>Differences in national tax regulations (e.g. VAT rules)</i> <i>Differences in national consumer protection rules</i> <i>Differences in national contract law</i> <i>Higher costs of cross-border delivery compared to domestic delivery</i> <i>Potentially higher costs involved in resolving complaints and disputes cross-border</i> <i>Higher risk of fraud and non-payments in cross-border sales</i> <i>Extra costs arising from language differences</i> <i>Extra costs from after-sales service in cross-border transactions</i> <i>Restrictions on cross-border sales imposed by manufacturers or suppliers</i> <i>Higher costs due to geographic distance</i> <p>Options:</p> <ol style="list-style-type: none"> <i>Very important</i> <i>Fairly important</i> <i>Not very important</i> <i>Not at all important</i> 	<p>How important are the following obstacles to the development of your cross-border sales to other EU countries?</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> <i>Additional costs of compliance with different national tax regulations (e.g. VAT rules)</i> <i>Additional costs of compliance with different consumer protection rules and contract law (including legal advice)</i> <i>Higher costs of cross-border delivery compared to domestic delivery</i> <i>Potentially higher costs involved in resolving complaints and disputes cross-border</i> <i>Potentially higher costs of the risk of fraud and non-payments in cross-border sales</i> <i>Extra costs arising from language differences</i> <i>Extra costs from after-sales service in cross-border transactions</i> <i>Restrictions on cross-border sales imposed by manufacturers or suppliers</i> <i>Extra costs arising from different consumption habits</i> <i>Higher costs due to geographic distance (EB359 Q1)</i> <p>Options:</p> <ol style="list-style-type: none"> <i>Very important</i> 	Asked to retailers which do sell online	New question based on the previous one	Module
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Q3b	<p>How important are the following obstacles to the development of online sales by your company?</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> 1. Additional consumer protection rules 2. Higher costs of delivery 3. Potentially higher costs involved in resolving complaints and disputes online 4. Higher risk of fraud and non-payment 5. Extra costs from after-sale services 6. Extra need for IT skills 7. Extra need for capital for investment in development of IT applications 8. Online sales are not applicable for my business <p>Options:</p> <ol style="list-style-type: none"> 1. Very important 2. Fairly important 3. Not very important 4. Not at all important 	<ol style="list-style-type: none"> 2. Fairly important 3. Not very important 4. Not at all important <p>(EB359 Q1)</p>	Asked to retailers which do not sell online	New question based on the previous one	Module
Q4	<p>Thinking about all non-food products currently available in your market in [OUR COUNTRY], do you think that ... ?</p> <ol style="list-style-type: none"> 1. Essentially all non-food products are safe 2. A small number of non-food products are unsafe 3. A significant number of non-food products are unsafe <p>(EB359 Q11)</p>		Asked to retailers which sell non-food products	No change	Core

Q5	<p>Imagine that a consumer bought a durable good 18 months ago and it breaks down without any fault on his part. He did not buy or benefit from any extended commercial guarantee. Does he have the right to have it repaired or replaced for free?</p> <p>1. <i>Yes</i> 2. <i>No</i> 3. <i>It depends on the product</i></p>	<p>Please complete the following statement correctly. The consumer has the right to ask for a defective product to be repaired?</p> <p>1. <i>Within 1 year from the date of the original purchase</i> 2. <i>Within 2 years from the date of the original purchase</i> 3. <i>Within a minimum of 2 years from the date of the original purchase and longer for some products</i> 4. <i>None of the above</i> (EB359 Q6a)</p> <p><i>Also the related questions Q6b and Q6c for the IE, UK and Scotland</i></p>	Asked to all	Question replaced with a specific product	Core
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Q6	<p>I will read 4 statements concerning legislation in [OUR COUNTRY] related to commercial practices. Some of them are prohibited and some are not. For each statement, please tell me if you think it is prohibited or not?</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> <i>To include an invoice or a similar document seeking payment in marketing material</i> <i>To run a promotional campaign stating "We offer a discount of 60%" although the products offered with a 60% discount are almost depleted</i> <i>To promote products for children including a direct call to parents to buy the advertised products by targeting directly the parents in the advertisements</i> <i>To describe a product as "free" although it is only available for free of charge to customers calling a premium rate phone number</i> <p>Options:</p> <ol style="list-style-type: none"> <i>Prohibited</i> <i>Not prohibited</i> 	<p>I will read 4 statements concerning legislation in [OUR COUNTRY] related to commercial practices. Some of them are prohibited and some are not. For each statement, please tell me if you think it is prohibited or not?</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> <i>To include an invoice or a similar document seeking payment in marketing material</i> <i>To advertise products at a very low price compared to other offers without having a reasonable quantity of products for sale</i> <i>To make exaggerated statements in an advertisement</i> <i>To describe a product as "free" although it is only available free of charge to customers calling a premium rate phone number</i> <p>Options:</p> <ol style="list-style-type: none"> <i>Prohibited</i> <i>Not prohibited</i> <p>(EB359 Q7)</p>	Asked to all	New options 2,3 replace the previous ones.	Core
Q12	<p>Please tell me whether you strongly agree, agree, disagree, strongly disagree with the following statement:</p> <p><i>Most environmental claims related to goods or services in your sector in [OUR COUNTRY] are accurate</i></p> <p><i>Scale: Strongly Agree to Strongly Disagree</i></p>	<p>In general, do you trust statements and offers made by your competitors about the environmental impact of their products?</p> <ol style="list-style-type: none"> <i>Yes, always</i> <i>Yes, in most cases</i> <i>Yes, in some cases</i> <i>No, never</i> <p>(EB359 Q10)</p>	Asked to all	Question rephrased	Core

Q13a	<p>Do you know any Alternative Dispute Resolution (ADR) bodies (i.e. arbitrators, mediators, ombudsman, consumer complaints boards or other out-of-court dispute resolution bodies) for settling disputes with consumers in [OUR COUNTRY]?</p> <p>1. Yes, and I am willing or obliged to use them 2. Yes, but I am not willing to use them 3. Yes, but those ADR bodies do not cover disputes concerning my business 4. No</p>	<p><i>Do you know any Alternative Dispute Resolution (ADR) bodies (i.e. arbitrators, mediators, ombudsman, conciliation bodies, consumer complaints boards, other out-of-court dispute resolution bodies) for settling disputes with consumers in [OUR COUNTRY]?</i></p> <p>1. Yes, but you are not a member of an ADR body 2. Yes and you are a member of an ADR body 3. No (EB359 Q15a)</p> <p><i>Also the similar questions Q15b and Q15c for Finland and Sweden</i></p>	Asked to all except Finland and Sweden	Options rephrased	Core
Q13b	<p>Do you know any Alternative Dispute Resolution (ADR) bodies (i.e. Consumer Disputes Boards, arbitrators, mediators, ombudsman, conciliation bodies, consumer complaints boards or other out-of-court dispute resolution bodies) for settling disputes with consumers in [OUR COUNTRY] ?</p> <p>Same options as in Q13a</p>		Asked to retailers from Finland	Options rephrased	Core
Q13c	<p>Do you know any out-of-court dispute resolution bodies (i.e. "Allmänna reklamationsnämnden," arbitrators, mediators, ombudsman, conciliation bodies, or consumer dispute boards) for settling disputes with consumers in [OUR COUNTRY] ?</p> <p>1. Yes, and your industry is covered by the public system for consumer dispute resolution 2. Yes, and your industry has its own dispute resolution body 3. No</p>		Asked to retailers from Sweden	Options rephrased	Core

Compliance and Enforcement					
Q7a	<p>Please tell me if you have come across each of the following unfair commercial practices by your competitors in the past year:</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> 1. <i>Offering products as free of charge even if they actually imply substantial charges</i> 2. <i>Pressuring consumers with persistent commercial calls or messages</i> 3. <i>Advertising falsely that a product is available only for a limited period</i> 4. <i>Writing false reviews as hidden adverts or as hidden attacks on competitors</i> 5. <i>Sending unsolicited products to consumers, asking them to pay for the products</i> 6. <i>Other unfair commercial practices</i> <p>Options:</p> <ol style="list-style-type: none"> 1. <i>Yes, in {OUR COUNTRY}</i> 2. <i>Yes, in another EU country</i> 3. <i>No</i> 	<p>In the past twelve months, have you come across misleading or deceptive advertisements, statements or offers made by your competitors?</p> <ol style="list-style-type: none"> 1. <i>Yes, on several occasions</i> 2. <i>Yes, once or twice</i> 3. <i>No</i> <p>(EB 359 Q8)</p> <p>In the past twelve months, have you come across fraudulent statements or offers made by your competitors ?</p> <ol style="list-style-type: none"> 1. <i>Yes, on several occasions</i> 2. <i>Yes, once or twice</i> 3. <i>No</i> <p>(EB359 Q9)</p>	<p>Asked to retailers which sell in other EU countries</p>	<p>New question</p>	<p>Core</p>
Q7b	<p>Please tell me if you have come across each of the following unfair commercial practices by your competitors in [OUR COUNTRY] in the past year:</p> <p><i>Same multiple choice as in Q7a</i></p> <p>Options: 1. <i>Yes</i>, 2. <i>No</i></p>		<p>Asked to retailers which do not sell in other EU countries</p>	<p>New question</p>	<p>Core</p>

Q8	<p>Please tell me whether you strongly agree, agree, disagree, or strongly disagree with each of the following statements in [OUR COUNTRY]:</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> <i>1. The public authorities actively monitor and ensure compliance with consumer legislation in your sector</i> <i>2. Consumer NGOs actively monitor compliance with consumer legislation in your sector</i> <i>3. The self-regulatory bodies actively monitor respect of codes of conduct or codes of practice in your sector</i> <i>4. The media regularly report on businesses which do not respect consumer legislation in your sector</i> <i>5. The public authorities actively monitor and ensure compliance with product safety legislation in your sector</i> <p>Scale: Strongly Agree to Strongly Disagree</p>	<p>The following statements relate to monitoring compliance with consumer and product safety legislation. Please say whether you strongly agree, agree, disagree, or strongly disagree with the following statements:</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> <i>1. The public authorities actively monitor and ensure compliance with consumer legislation in your sector in [OUR COUNTRY]</i> <i>2. The public authorities actively monitor and ensure compliance with product safety legislation in your product in [OUR COUNTRY]</i> <i>3. The public authorities actively monitor and ensure compliance with food safety legislation in your sector in [OUR COUNTRY]</i> <i>4. Consumer NGOs actively monitor compliance with consumer legislation in your sector in [OUR COUNTRY]</i> <i>5. The self-regulatory bodies actively monitor respect of codes of conduct or codes of practice in your sector in [OUR COUNTRY]</i> <i>6. The media regularly report on businesses which do not respect consumer legislation in your sector</i> <i>7. You have changed your commercial practices as a result of a media story</i> <p>Scale: Strongly Agree to Strongly Disagree (EB359 Q14)</p>	Options 1-4 asked to all. Option 5 asked to retailers of non-food products.	Question slightly modified. Options 3 and 7 discarded.	Core
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Q9	<p>With regard to product safety, please tell me whether any of the following took place in your sector in the past two years:</p> <p>Multiple choice::</p> <ol style="list-style-type: none"> <i>1. The public authorities asked for the withdrawal or recall of products sold by firms in the sector</i> <i>2. The public authorities issued public warnings about the safety of products sold in the sector</i> <p>Options: Yes/ No</p>	<p>In relation to product safety, did any of the following take place in your company in the past two years?</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> <i>1. You received consumer complaints about the safety of any of the products you sold</i> <i>2. The authorities checked the safety of any of the products you were selling</i> <i>3. The authorities asked you to withdraw or recall any of the products you were selling</i> <i>4. The authorities asked you to issue a public warning about the safety of any of the products you were selling</i> <i>5. You, as a retailer, carried out some tests to make sure that any of the products you were selling were safe</i> <i>6. Any other enforcement action related to product safety</i> <p>Options: Yes/ No (EB359 Q13)</p>	Asked to all	Question replaced by a new one.	Core
Q10	<p>I will read you three statements about compliance with consumer legislation in [OUR COUNTRY]. Please tell me whether you strongly agree, agree, disagree or strongly disagree with each of them:</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> <i>1. Your competitors comply with consumer legislation</i> <i>2. It is easy to comply with consumer legislation in your sector</i> <i>3. The costs related to compliance with consumer legislation in the sector are reasonable</i> 	<p>Now, thinking about consumer legislation, please tell me to what extent you agree or disagree with the following statements. Let me confirm once more that all responses are strictly anonymous.</p> <p>Multiple choice:</p> <ol style="list-style-type: none"> <i>1. You comply with consumer legislation</i> <i>2. Your competitors comply with consumer legislation</i> <p>Scale: Strongly Agree to Strongly Disagree</p>	Asked all	Question replaced by a new one.	Core

	<i>Scale: Strongly Agree to Strongly Disagree</i>				
Q11	<p>I will read you similar statements about compliance with consumer legislation in other EU countries. Please tell me whether you strongly agree, agree, disagree, strongly disagree with each of them:</p> <p>Multiple choice:</p> <p>1. <i>Companies competing with you in other EU countries comply with consumer legislation</i></p> <p>2. <i>It is easy to comply with consumer legislation in your sector in other EU countries</i></p> <p>3. <i>The costs related to compliance with consumer legislation in the sector are reasonable in other EU countries</i></p> <p><i>Scale: Strongly Agree to Strongly Disagree</i></p>		<p>Asked to retailers which sell to other EU countries</p>	New question	Core

Complaints and Dispute Resolution					
Q14a	<p>During the past 12 months, did your company receive complaints from consumers in [OUR COUNTRY]?</p> <p>1. Yes, through in-house customer service</p> <p>2. Yes, through non-governmental consumer organizations</p> <p>3. Yes, through public authorities</p> <p>4. Yes, through alternative dispute resolution bodies (such as ombudsman, consumer complaints board, arbitrators, mediators, or other out-of-court bodies)</p> <p>5. Yes, through courts</p> <p>6. Yes, through other channels</p> <p>7. Didn't receive any complaints</p>		Asked to all except Finland and Sweden	New question	Core
Q14b	<p>During the past 12 months, did your company receive complaints from consumers in [OUR COUNTRY]?</p> <p>1. Yes, through in-house customer service</p> <p>2. Yes, through non-governmental consumer organizations</p> <p>3. Yes, through public authorities</p> <p>4. Yes, through alternative dispute resolution bodies (such as Consumer Disputes Boards, arbitrators, mediators, ombudsman, conciliation bodies, consumer complaints boards, other out-of-court dispute resolution bodies)</p> <p>5. Yes, through courts</p> <p>6. Yes, through other channels</p> <p>7. Didn't receive any complaints</p>		Asked to retailers from Finland	New question	Core

Q14c	<p>During the past 12 months, did your company receive complaints from consumers in [OUR COUNTRY]?</p> <p>1. Yes, through in-house customer service</p> <p>2. Yes, through non-governmental consumer organizations</p> <p>3. Yes, through public authorities</p> <p>4. Yes, through alternative dispute resolution bodies (such as arbitrators, mediators, ombudsman, conciliation bodies, consumer complaints boards, other out-of-court dispute resolution bodies)</p> <p>5. Yes, through courts</p> <p>6. Yes, through other channels</p> <p>7. Didn't receive any complaints</p>		Asked to retailers from Sweden	New question	Core
Q15	<p>During the past 12 months, did your company receive complaints from consumers in other EU countries?</p> <p>1. Yes, through in-house customer services</p> <p>2. Yes, through European Consumer Centres</p> <p>3. Yes, through non-governmental consumer organisations</p> <p>4. Yes, through public authorities</p> <p>5. Yes, through alternative dispute resolution bodies (such as ombudsman, consumer complaints board, arbitrators, mediators, or other out-of-court bodies)</p> <p>6. Yes, through the European Small Claims Procedure</p> <p>7. Yes, through courts (other than through the European Small Claims Procedure)</p> <p>8. Yes, through other channels</p>		Asked to retailers with cross-border sales	New question	Core

	9. <i>Didn't receive any complaints</i>				
Q16	<p>What type of complaints did your company receive from consumers in [OUR COUNTRY] during the past 12 months? Were they complaints ...</p> <p>1. <i>about the product itself</i> 2. <i>about late or no delivery</i> 3. <i>about contractual terms</i> 4. <i>about extra charges</i> 5. <i>about safety of products</i> 6. <i>about remedies offered by the company following a complaint</i> 7. <i>Other</i></p>		<p>Asked to retailers who received complaints in their own country</p>	New question	Module

Q17	<p>What type pf complaints did your company receive from consumers in other EU countries during the past 12 months? Were they complaints ...</p> <p><i>Same options as in Q16</i></p>		<p>Asked to retailers who received complaints from consumers in other EU countries</p>	New question	Module
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Table 67 Dimension 1: Knowledge, Awareness and Trust – List of core indicators

No	Indicator	Definition	Consumers / Retailers	Level	Direction ⁽¹⁾
<i>Domestic transactions</i>					
1	Knowledge of consumer rights	The median/ average number of correct answers given by consumers in the country	Consumers	Country	↑
2	Trust in organizations	The median/ average number of statements selected by the consumers in the country	Consumers	Country	↑
3	Perceptions of ADR services	Percentage of consumers who agree with the statement on easiness to solve dispute through ADRs	Consumers	Country	↑
4	Perceptions of Courts	Percentage of consumers who agree with the statement on easiness to solve dispute through Courts	Consumers	Country	↑
5	Safety of non-food products	The proportion of consumers who perceive at least a significant number of non-food products in the market as safe	Consumers	Country	↑
6	Sustainable consumption (proxy 1)	Percentage of consumers who agree with the statement that most environmental claims for products are accurate	Consumers	Country	↑
7	Sustainable consumption (proxy 2)	Percentage of consumers who state that the environmental impacts of products have an influence on at least some of their purchasing decisions	Consumers	Country	↑
8	Confidence in online shopping	The proportion of consumers who are confident to purchase products online from retailers in the country	Consumers	Country	↑
9	Knowledge of consumer legislation	Median/ average number of correct choices made by the retailers in the country	Retailers	Country	↑
10	Awareness of ADR services	Percentage of retailers who state they are aware of ADR bodies that covers their sector.	Retailers	Country	↑
11	Safety of non-food products	Percentage of retailers which consider most of the non-food products offered in the sector as safe.	Retailers	Country	↑
12	Environmental claims	Percentage of retailers who trust the environmental claims of competitors in the sector	Retailers	Country	↑
13	Confidence and interest in online selling	Percentage of retailers who do not yet sell online, but they state they are interested and confident to do so in the near future.	Retailers	Country	↑
<i>EU cross-border transactions</i>					
1	Confidence in cross-border online purchasing	Percentage of EU consumers who are confident to purchase products online from retailers located in other EU countries	Consumers	EU	↑
2	Confidence and interest in cross-border online selling	Percentage of EU retailers who are interested and confident to sell products online to consumers located in other EU countries	Retailers	EU	↑
(1) Direction for better consumer conditions: ↑ (the higher the better), ↓ (the lower the better)					

Table 68 Dimension 2: Compliance and Enforcement – List of core indicators

No	Indicator	Definition	Consumers / Retailers	Level	Direction ⁽¹⁾
<i>Domestic transactions</i>					
1	Exposure to UCPs	The median/ average number of unfair commercial practices selected by consumers in the country	Consumers	Country	↓
2	Experience with shopping problems	The median/ average number of shopping problems experienced consumers in the country	Consumers	Country	↓
3	Prevalence of UCPs	The median/ average number of unfair commercial practices selected by retailers in the country	Retailers	Country	↓
4	Perceived compliance	Percentage of retailers who agree with the statement that their competitors comply with consumer regulations	Retailers	Country	↑
5	Institutional and market conditions for compliance	The median/ average number of statements on the role of the public authorities, NGOs, self-regulatory bodies, and the media agreed with by the retailers in the country	Retailers	Country	↑
6	Ease and cost of compliance	Percentage of retailers who agree with the statements that consumer regulations are easy to implement and do not impose a significant cost on their business	Retailers	Country	↑
<i>EU cross-border transactions</i>					
1	Exposure to UCPs	The median/ average number of unfair commercial practices selected by consumers in the EU	Consumers	EU	↓
2	Experience with shopping problems	The median/ average number of shopping problems experienced by EU consumers	Consumers	EU	↓
3	Prevalence of UCPs	The median/ average number of unfair commercial practices selected by EU retailers	Retailers	EU	↓
4	Perceived compliance	Percentage of retailers who agree with the statement that their competitors for cross-border consumers comply with consumer regulations	Retailers	EU	↑
5	Ease and cost of compliance	Percentage of retailers who agree with the statements that cross-border EU consumer regulations are easy to implement and do not impose a significant cost on their business	Retailers	EU	↑

(1) Direction for better consumer conditions: ↑ (the higher the better), ↓ (the lower the better)

Table 69 Dimension 3: Complaints and Dispute Resolution – List of core indicators

No	Indicator	Definition	Consumers / Retailers	Level	Direction ⁽¹⁾
<i>Domestic transactions</i>					
1a	Propensity to complain	Percentage of consumers who took an action and complained when experiencing a shopping problem.	Consumers	Country	↑↓
1b	Reluctance to complain	Percentage of consumers who did not take any action due to lack of institutional support when experiencing a shopping problem	Consumers	Country	↓
2	Satisfaction with complaint handling	Median/ average level of satisfaction expressed by consumers with respect to the way their complaints have been handled.	Consumers	Country	↑
3	Experiences with ADR schemes	Percentage of consumers with ADR experience who agree with the statement that it is easy to solve disputes through ADR schemes	Consumers	Country	↑
4	Participation in ADR schemes	Percentage of retailers who are willing or obliged by law to participate in an ADR scheme.	Retailers	Country	↑

(1) Direction for better consumer conditions: ↑ (the higher the better), ↓ (the lower the better)

Appendix to chapter 2.1: multivariate analyses on complaints' severity

About complaints, we test the robustness of the count variable built on the number of complaint channels by considering a variable that takes into account the severity of the complaint. The rationale is that consumers tend to escalate in their complaint behaviour in case the outcome was not satisfactory. Therefore a typical consumer starts complaining with the retailer, and arrives until court only if forced due a bad complaint handling process and if the problem is important enough to justify this decision. Based on question Q10⁶⁶ we build a variable that increases linearly from the least serious (or vaguer) level of complaint, and reaches the highest value at the most serious level of complaint. The values to this indicator are classified as follows:

- A value of 1 is assigned to the complaint addressed toward agents classified as “others”
- A value of 2 for complaints addressed to “the retailer or service provider”
- A value of 3 for complaints addressed to “the manufacturer”
- A value of 4 for complaints addressed to “a public authority”
- A value of 5 for complaints addressed to “an out-of-court dispute resolution body (ADR) such as an ombudsman, arbitration, mediation or conciliation body”
- A value 6 for complaints addressed to “court”
- If a consumer ticks on more than one option, for instance: complaints to retailer and complaints to manufacturer, the variable takes a value of 10 (i.e. 2+3).

Table 70 contains the results of this additional check. The result is in line with the count model on consumer complaints described in Table 29. Similar significances are found for the variables on age and spoken languages although the magnitudes in this model are slightly higher. In contrast with previous model the ease of settling disputes through out-of-court is negative and significantly associated with the dependent variable on complaints.

⁶⁶ Q10 You experienced a problem and complained to whom? (READ OUT – MULTIPLE ANSWERS POSSIBLE)

1. You complained about it to the retailer or service provider;
2. You complained about it to the manufacturer;
3. You complained about it to a public authority;
4. You brought the matter to an out-of-court dispute resolution body (ADR) such as an ombudsman, arbitration, mediation or conciliation body;
5. You took the business concerned to court;
6. Other (DO NOT READ OUT);
7. DK/NA

Table 70 Multivariate analyses on complaints' severity

	Complain severity
Age	0.043* (0.02)
Age ²	-0.000* (0.00)
Female	-0.001 (0.08)
Student	-0.152 (0.22)
Self-employed	0.101 (0.16)
Employed	-0.007 (0.13)
Retired	0.091 (0.18)
Manual worker	0.046 (0.20)
Small town	0.072 (0.10)
Large town	0.194 (0.10)
Numeric skills (total)	-0.062 (0.07)
Spoken languages (total)	0.176** (0.06)
Financial difficulty	-0.156 (0.09)
English	-0.048 (0.12)
German	-0.086 (0.13)
French	0.01 (0.17)
Mobile phone	0.406 (0.33)
Online purchase	0.14 (0.10)
Trust in PA	0.095 (0.09)
Trust in NGOs	0.043 (0.09)
Ease of settling disputes through out-of-court	-0.216* (0.09)
Ease of settling disputes through Court	0.149 (0.09)
Knowledge of consumers' rights (total)	0.03 (0.05)
<i>Country dummies</i>	<i>yes</i>
pseudo R-squared	0.034
AIC	12653
BIC	12967
N	3085

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