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Consumer rights and economic growth

Final Report

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Executive summary

Introduction

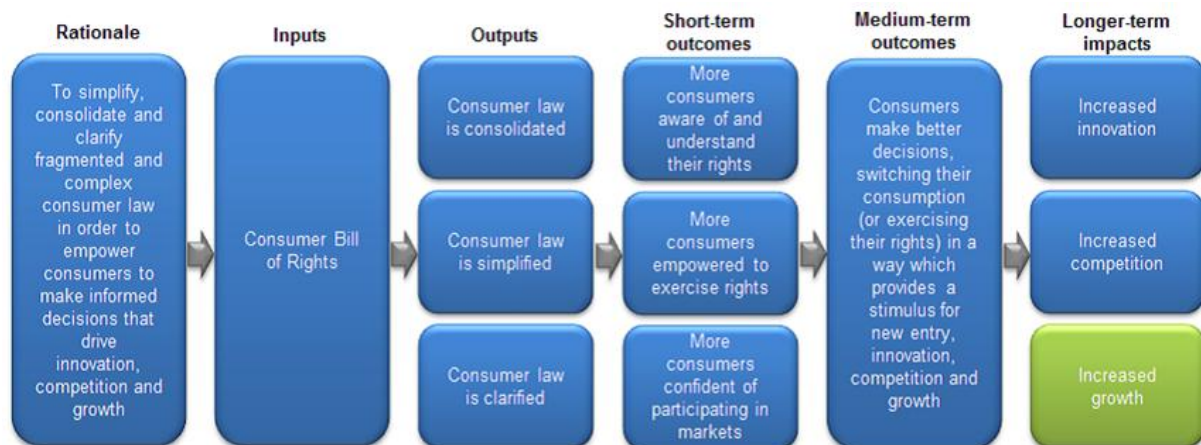
Well-functioning markets entail that consumers are treated fairly, are informed of their rights and are able to exercise those rights effectively. The Department for Business, Innovation and Skills (BIS) is preparing a new *Consumer Bill of Rights* to consolidate, simplify and modernise these often complex and difficult-to-interpret legislative provisions for consumers and businesses.

Based on the understanding that more empowered, confident and protected consumers result from simplified and better understood consumer rights, ICF GHK was commissioned by BIS in September 2012 to assess the hypothesis that better understood and simplified consumer rights have a positive impact on economic growth.

The first objective of the study was to examine the strength of the relationship between simpler consumer rights and economic growth through a detailed review of the theoretical and empirical literature and via international case studies. In particular, the review sought evidence to identify the conditions necessary for the predicted hypothesis to hold and identify if and how any attempts have been made to quantify these relationships. Based on the outcomes of this review, the second objective was to propose a clear methodology to help BIS quantify and monetise (where possible) the net benefits to consumers of the proposed changes to consumer law.

A reference framework (or “intervention logic”) was established for the purposes of structuring the research and analysis, plus illustrating the hypothetical linkages between simplified consumer law and economic growth (Figure 1).

Figure 1 Intervention logic illustrating the linkages in impacts from simplified consumer law



Key findings

The presence of a causal relationship between simplified consumer law and growth

Over 20 pieces of theoretical, empirical and policy-related literature – primarily of an evaluative nature – support the overarching hypothesis that simplified consumer law has a positive impact on wider economic outcomes, including economic growth. Further, on the basis of the literature review, it is concluded that the linkages identified in Figure 1 between outputs, short- and medium-term outcomes are generally appropriate and complete.

Due to the limited availability of literature explicitly relating to consumer law (as opposed to legislative simplification more generally), the strength of evidence varies depending on the relationship assessed. The strongest evidence exists in relation to the simplification and consolidation of consumer law leading to more empowered consumers, who are confident and willing to exercise their rights. This relationship was cited extensively in studies as playing an important role in improving the functioning of markets through greater competition and as a driver of innovation leading to economic growth. The

majority of these studies could be found in evaluations related to the functioning of the EU internal market.

Less evidence was found to support the direct links between simplified consumer rights, consumer awareness and economic growth. Further, the literature indicates that for simplified rights to have a significant impact on consumer awareness, other factors such as consumer education, knowledge and awareness raising measures should operate in tandem with simplified rights. Cseres, K. (2006), Cullum, P. (2010) and BIS (2011) support this view in the theoretic, empirical and policy literature respectively.

The literature also notes that the behaviour (preferences) of consumers and their associated rationality is highly uncertain and fragmented, such that other factors may restrict consumers' ability to make well-informed and confident purchasing decisions. These issues were highlighted in a number of case studies relating to Australia, New Zealand and the European Union (EU).

Despite recognition in the literature of the linkages between simplified consumer law and the wider economic benefits for competition, innovation and growth, these links are rarely quantified or monetised in the literature. This is an evidence gap which, if addressed, would support more reliable and robust policy development and ex ante appraisal.

Measuring the impacts of simplified consumer law

Case studies identified through the literature review provided the first opportunity to quantify the impacts of simplified consumer law. Each case study concluded that the potential positive impacts of simplified consumer law on growth and other wider economic impacts are substantial (in the range of \$1.5 billion to \$4.5 billion per annum in Australia). In the EU, the scale of potential benefits which could be realised from simplified consumer law could be substantial, with an estimated €1 billion of net consumer detriment in the package travel sector alone (accounting for the compensation paid by service providers). Despite these figures, none of the cases studies explicitly attempt to quantify the impact of simplification on economic growth or employment, per se. Given that monetary estimates have been generated, it is conceivable that reporting the results as a percentage of GDP and equivalent employment could result in approximations of the order of magnitude on growth and employment.

Regarding the methods used to estimate these impacts, only one appears to have been developed specifically for the purposes of assessing the impacts of simplified consumer law, accounting for both direct and indirect (short- to longer-term) impacts. This is the experimental model developed by the Australian Productivity Commission referred to as the CMOD model. Also adopted by the authors of the New Zealand case study, CMOD is a structured MS Excel-based model which monetises the benefits to consumers from:

- a lower incidence of consumer detriment (economic and emotional) from unsafe or otherwise defective goods and services;
- lower transaction costs in making purchases resulting from reductions in the time taken to make comparisons and seek reassurance that correct choices are being made; and
- gains from increased innovation.

However, CMOD is restricted by:

- assumptions which are arbitrary and/or based on limited reliable evidence in some cases;
- a static approach to the analysis, ignoring dynamic impacts from induced and spillover effects¹; and
- a limited ability (beyond productivity impacts) to assess longer-term impacts on economic growth.

¹ Static relates to the fact that the analysis occurs for a single period in time and captures only the direct impacts from simplification. In a dynamic approach, any savings made by the consumer (i.e. from finding lower prices, avoiding defective products or being mis-sold) results in greater disposable income, increased expenditure in the future and related employment in the rest of the economy. These are induced consumption effects. In the case where initial innovation leads to further innovations, then this is an example of spillovers from the initial driving action (i.e. simplification).

Recommended approach to measuring the impacts of simplified consumer law

CMOD is a useful first step in the quantification of relevant impacts for impact assessment and evaluative studies, provided appropriate caveats are included in any reporting. Examining the assumptions used by the Productivity Commission in its analysis, this report recommends that in a UK context:

- 'innocent' detriment should not be quantified and, if it is quantified, should account for less than 10 per cent of consumer detriment;
- productivity estimates should be based on an historical average of 1.45 per cent annual productivity growth in the UK between 1998 and 2011 (as calculated from Office for National Statistics data); and
- equivalent UK data sources should be applied where available. Namely, the OFT's 'Consumer Detriment' survey (2008) and the most recent Office for National Statistics data when populating the model.

The remaining assumptions should be applied unchanged from the Productivity Commission's model run, described in Section 3 of this report.

Where dynamic and longer-term impacts are expected from the legislative changes proposed, the study recommends that supplementary analysis is undertaken. Three approaches are considered:

- Input-Output (IO) tables and multipliers;
- Computable General Equilibrium (CGE) models; and
- Macro econometric models.

Whilst IO tables are simple to use and provide a useful scaling of the impacts, they add little to the CMOD analysis and remain too simplistic to capture the induced effects on economic growth.

CGE models are a feasible alternative, but suffer from limiting assumptions around the behaviour of consumers and other market participants, reducing their effectiveness in short- and medium-term estimation. Macro econometric models are therefore considered the most appropriate for this study as they most accurately reflect the real economy (the parameters are derived from empirical data and updated regularly) when assessing the most indirect range of impacts. However, care should be taken when using the results of CMOD as inputs into these models.

Finally, other indicators such as the number of consumers switching suppliers in a given market per annum, the number of consumers using price comparison websites or seeking information on their rights from official government sources (online, post or telephone), and measures of the money saved by consumers avoiding scams or making ill-advised purchasing decisions should be considered as adding value to the analysis, by providing a sense check on the quantified impacts derived from the adapted CMOD model and also contributing to the overall evidence base to ensure conclusions are reliable and robust for impact assessment purposes. Although caution should be used if causality (i.e. clear and direct links between these indicators and a simplification in consumer law) is difficult to establish.

Concluding remarks

The hypothesis that simplified consumer law can lead to improvements in consumer and economic outcomes, especially when reinforced with consumer campaigns to raise awareness of those rights is supported in the existing literature, as empowered and engaged consumers improve the functioning of markets. However, there is little to no substantive evidence supporting the hypothesis that by encouraging innovation and competition through simplified consumer law, positive impacts on longer term goals such as economic growth result. Further, the literature makes few attempts to quantify – and even fewer attempts to monetise – the scale and nature of the improvements it does identify.

The case studies reviewed in this report show that the Australian Productivity Commission's CMOD model is a rare exception in this respect. It is the only example that the study could find of a tailored and structured methodology for assessing the economic impacts of simplified consumer law.

On this basis, the study concludes that the Australian CMOD model could prove useful for measuring the impact of the UK *Consumer Bill of Rights* with some adaptations to make it more appropriate in

this context. In addition, a CMOD-based analysis of the impacts of a *Consumer Bill of Rights* could benefit by being supplemented with a macroeconomic assessment of the longer-term and wider economic impacts where relevant and appropriate. Finally, additional evidence of consumer impacts (such as switching rates and/or reduced compensation payments) obtained from research should also be included where this strengthens the evidence base in impact assessment.

1 Introduction

1.1 Background and context

In September 2012, ICF GHK was commissioned by the Department for Business, Innovation and Skills (BIS) to undertake a study into the links between consumer rights and economic growth. The aim was to gather evidence to inform BIS's final, overarching impact assessment for the proposed *Consumer Bill of Rights*². In this regard, this study will help to support the case for implementing the reforms through a unified legislative framework.

1.2 Aim of the study

The aim of this study is to characterise and, where possible, quantify the relationship between the consolidation, simplification and clarification of consumer rights and economic growth. The Government's consultation on the reforms to consumer law includes a number of preliminary impact assessments on the main reforms. In addition, BIS commissioned a separate study to establish a baseline of business costs and practices with respect to existing consumer law against which it will assess the likely business impacts of the consumer law reforms.

Therefore, the objective of this study is to understand the likely overall scale and nature of the impact of a *Consumer Bill of Rights* on economic growth.

To meet this objective, the study focuses on:

- establishing the links between consumer rights and economic growth; and
- proposing a clear methodology for estimating (and, where possible, quantifying and monetising) the overall net benefits of simplifying and clarifying consumer rights

1.3 Methodology

The study methodology entailed three main stages:

- **Stage 1: Initial preparatory work and inception** –this involved setting out the criteria for identifying relevant literature to review. A succinct review protocol was established enabling a structured and systematic search strategy to be developed. The review questions outlined as part of this stage ensured that all relevant aspects of the literature were covered. In line with the objectives of the literature review, deciding which publications to be included and excluded in the review was based on a set of inclusion/exclusion criteria (e.g. by time period, language and country, etc.). A key aspect was the applicable publication types (e.g. peer-reviewed journal articles, non-peer reviewed academic research outputs, government-commissioned research, evaluations, grey literature, etc.). In that respect, the search strategy detailed the sources of material to be accessed (e.g. the databases, the research bodies, the government departments and agencies). Annexes 1 and 2 provide a detailed description of the approach undertaken to conduct the literature review.
- **Stage 2: Research, analysis and reporting** –this involved reviewing the theoretical and empirical literature gathered in Stage 1. The theoretical literature helped to establish the nature and extent of the relationships between consumer rights and economic growth, allowing conclusions to be drawn surrounding the type of impacts that the simplification and clarification of consumer rights will have on growth. The empirical literature, highly complemented by specific country case studies (including Australia, New Zealand and the European Union), helped to establish the scale of these impacts and approaches for measuring them. Content from the literature was recorded using a 'data extraction form' (Annex 2). Once all evidence was retrieved and recorded, it was then synthesised. Synthesis involved drawing results together, rigorous analysis and drawing conclusions. In particular, the evidence from the literature review was synthesised to document the

² BIS (2012) *Reforming Consumer Rights*: <http://www.bis.gov.uk/policies/consumer-issues/consumer-rights>

links between simplified consumer rights and: (1) consumer confidence; (2) consumer behaviour, and (3) economic growth.

- **Stage 3: In-depth case study analysis and discussion of methodologies for the quantification of benefits from a simplification of consumer rights**—the final stage of the study involved supplementing the evidence gathered via the literature review with a small number of case studies of other countries that have recently simplified their consumer regulatory framework. Case studies involved reviewing changes in consumer law in: (1) Australia (*Australian Consumer Law (ACL)*); (2) New Zealand (*Consumer Law Reform Bill*), and (3) the EU (European Commission’s *Package Travel Directive*). The case studies helped in documenting metrics, techniques and worked examples that can be used to estimate total net benefits associated with a *Consumer Bill of Rights*. The information and evidence from the literature review and the case studies allowed a robust methodology to be developed in order to: (1) monetise the short-medium term effects associated with simplified consumer law, and (2) estimate the longer-term effects associated with simplified consumer law, including measuring the impact of the short-medium term effects on growth.

1.4 Structure of this report

This report is structured as follows:

- Section 2 provides a detailed description of the literature evidence and selected case studies on the links between a simplified consumer legislative framework and economic growth;
- Section 3 discusses in length relevant methodologies for quantifying the impacts of a simplification of consumer law; and
- Section 4 provides key conclusions with regard to the links between simplified consumer law and economic growth and the appropriate methodology to measure the impacts of the proposed *Consumer Bill of Rights*.

Annexes provide supporting material, principally related to the approach undertaken to conduct the literature review and a bibliography.

2 Evidence on the links between simplified consumer law and growth

This section summarises evidence on the nature and strength of the possible linkages between a simplification of consumer law and economic growth.

2.1 Overview

2.1.1 Context

Consumer spending is a crucial consideration for policy makers concerned with sustainable economic growth, accounting for more than half of UK GDP (as at 2010³). This implies that understanding what drives consumer spending behaviour is important for understanding the links to economic growth.

Existing literature and evidence suggests that empowered consumers help to drive economic growth by rewarding efficient, productive and innovative businesses through the choices they make⁴. Empowered consumers make better choices and get better deals and, as such, tend to obtain better value, better customer service and better support.

Public policy has an important role to play, helping to empower consumers by protecting their rights and overcoming consumer detriment; particularly for vulnerable consumers (for instance, by having realistic redress mechanisms in place should things go wrong). However, in the UK, while existing consumer law offers strong protection to consumers in principle, it is fragmented, complex and open to misinterpretation – a result of its piecemeal development over the years. Poorly understood law can undermine competitiveness because it is economically unproductive and tends to favour less scrupulous businesses which do not value consumer goodwill but, rather, exploit consumer uncertainty⁵.

2.1.2 Explaining the links between simplified consumer rights and economic growth

There are several steps that might be considered in explaining the economic benefits that could result from a simplification of consumer rights. These steps are mapped through the use of an ‘intervention logic’ to describe: (1) the relationship between a simpler and clearer consumer legislative framework and consumer confidence/empowerment; (2) the impact of this improved confidence/empowerment on actual consumer behaviour (such as switching consumption or seeking redress); and (3) the impact of these changes in consumer behaviour on economic growth (e.g. via innovation and competition).

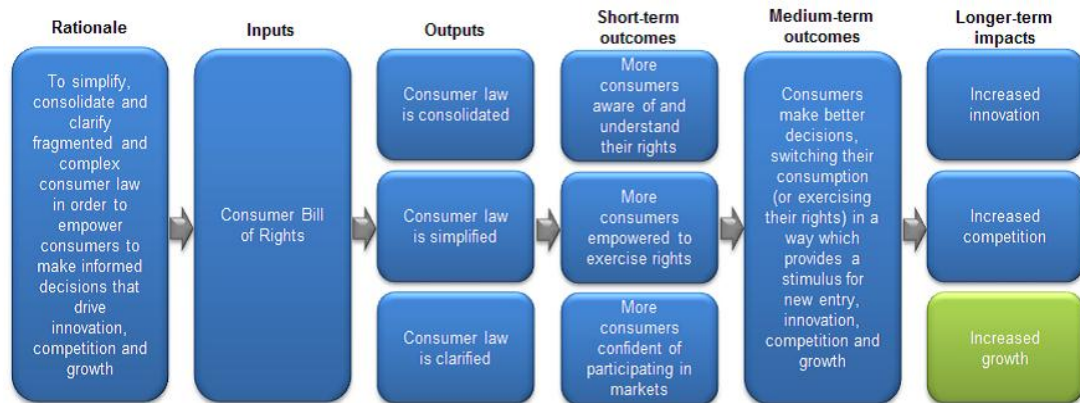
Figure 2.1 illustrates this intervention logic which highlights the outputs and short-, medium- and longer-term outcomes that might be expected to result from simplified consumer rights.

³BIS (2011), *Better Choices: Better Deals – Consumers Powering Growth*, available at <http://www.bis.gov.uk/assets/biscore/consumer-issues/docs/b/11-749-better-choices-better-deals-consumers-powering-growth.pdf>

⁴BIS (2012): *Empowered Consumers and Growth: Literature Review – Final Report*, by ICF-GHK, 17 May 2012, available at: <http://www.bis.gov.uk/assets/biscore/consumer-issues/docs/e/12-977-empowered-consumers-and-growth-literature-review>

⁵BIS (2012) *Enhancing Consumer confidence by Clarifying Consumer Law: Consultation on the supply of goods, services and digital content*: <http://www.bis.gov.uk/assets/BISCore/consumer-issues/docs/E/12-937-enhancing-consumer-consultation-supply-of-goods-services-digital.pdf>

Figure 2.1 Intervention logic model linking simplified consumer rights and economic growth



The underlying hypothesis/logic is that consumers lack confidence and certainty when asserting and exercising their rights if existing consumer law is fragmented, complex and opaque in nature. This will undermine their ability to seek redress and switch consumption in a manner that punishes inefficient, poor-quality businesses while rewarding efficient, high-quality businesses. This lack of consumer participation will reduce pressure on businesses to innovate and pursue efficiency in order to offer high quality products that are price competitive. Ultimately, this type of ‘market inertia’ weakens growth and the effectiveness of competitive consumer markets. Therefore, by simplifying, consolidating and clarifying existing consumer law, consumers are expected to become empowered and exercise more informed consumption choices. This will help create greater incentives for businesses to compete and foster economic growth by way of increased market innovation, productivity and efficiency.

2.2 Literature review findings

The reference framework presented above was used to guide the review of theoretical and empirical literature. This facilitated the ‘testing’ of the hypotheses regarding the relationship between simplified consumer law and economic growth.

In this regard, the literature review focused on seeking evidence for three main hypotheses regarding the direct and indirect outcomes associated with simplified consumer law:

- **direct (short/medium-term) outcomes:**

- simpler and clearer consumer law empowers consumers and makes them more confident when participating in markets – by generating greater awareness and understanding of consumer rights, simplified consumer law informs and equips consumers with the tools to seek out the best deals, make informed decisions and seek redress;
- this improved confidence/empowerment has a positive impact on actual consumer behaviour (such as switching consumption or seeking redress) – by empowering consumers, they become more responsive to the incentives and information present in the market, resulting in actual changes in behaviour, such as switching consumption from less efficient to more efficient merchants, and seeking redress when things go wrong; and

- **indirect (longer-term) impacts:**

- in the longer-term, these changes in consumer behaviour have a positive impact on economic growth (via increased innovation and competition) – the changes in consumer behaviour create strong incentives for well-functioning and efficient businesses that innovate and compete on the basis of price and quality, leading to improved productivity and economic growth.

2.2.1 Direct (short/medium-term) outcomes

The review of literature began by seeking evidence on the direct (short/medium-term) outcomes associated with simplified consumer law. These relate to improvements in consumer confidence/empowerment leading to changes in consumer behaviour.

The key findings from the literature are:

- **Simplified consumer law can empower consumers and raise their confidence when participating in markets** – the literature concludes that the simplification of otherwise fragmented and piecemeal consumer law can empower consumers by increasing their awareness and understanding of their rights. Only if consumers are adequately informed about their rights as a consumer can they really ‘trade’ with confidence. In this regard, the literature also concludes that:
 - with the right information and skills, consumers are able to participate more actively in consumer markets, being more confident to choose the best deal available to them. For example, a minimum level of product information quality, appropriate cooling-off periods, and the adequate provision of information about consumer rights and how to exercise them are considered essential for more confident and active consumers in the internal market⁶. In another study investigating how consumers respond to information, the conclusion that there is often too much information, which is over complex, unappealing and simply ignored by consumers is raised⁷. Concluding that *“across society...a desire for simple, succinct information exists. Decision-trees and other tools that helped people navigate through the process of making choices were preferred to text which was often written by lawyers ... to help consumers make informed choices and [regulations] have an impact on behavioural outcomes”* highlighting how simplification can contribute to greater consumer participation in markets and the success of regulatory interventions;
 - consumers become more demanding of high-quality goods, services and customer care. The Consumer Council found that in 2007: *“More people today are willing to take action than in 2003 when they feel they have had poor quality goods and services and almost twice as many feel sufficiently confident in their knowledge to put complaints in writing”*. Further *“Informed and confident consumers are not only less vulnerable to bad commercial practice, they are more likely to expect and, if necessary, demand high quality commercial practice from those who deliver goods and services”*⁸;
 - consumers’ increased awareness means that they are better able to deal confidently with issues such as complaining about faulty goods or poor service.
- **Simplified consumer law results in changes in the behaviour of these empowered and confident consumers** – evidence from the literature suggests that these empowered and confident consumers only truly realise the benefits of simplified consumer law by actually exercising their rights and placing a discipline on the market to deliver goods and services which offer good value for money. The key points arising from the literature include:

⁶ Macsim, A. and Henchel, R. (2012): A Comparative Law and Economic Analysis of the Maximum Harmonisation Effects on Consumers and Businesses - The Case of the Cooling-Off Period from Online Contracts, Aarhus School of Business, Aarhus University, available at: <http://pure.au.dk/portal-asb-student/files/44659752/Thesis.pdf> Part II, pages 18-32 discuss the benefits of distance selling legislative provisions regarding quality of information encouraging consumer engagement in cross-border trade.

⁷ BRE/NCC (2007): Warning: Too Much Information Can Harm, by Better Regulation Executive (BRE); National Consumer Council (NCC), available at: <http://www.berr.gov.uk/files/file44588.pdf> Page 7 summaries the identified problems faced by consumers and page 10 the conclusions.

⁸The Consumer Council (2008): Well, What do Consumers Know Now? - A Consumer Council Progress Report, quotes taken from pages 3 and 7, available at: www.consumerCouncil.org.uk/publications/?id=317.

- with greater knowledge about their rights, consumers can make better use of remedies (e.g. seeking compensation through refunds / small claims and time savings through reduced search costs, etc.)⁹; and
- consumers that switch their consumption decisions and seek redress when things go wrong can result in increased consumer welfare and/or reduced consumer detriment, consistently reported in the literature, particularly as a result of the reduction in the mis-selling / mis-buying of products¹⁰.

2.2.2 Indirect (longer-term) impacts

The review of literature also sought evidence on the indirect (longer-term) impacts that simplified consumer rights can have, including on innovation, productivity and economic growth.

In theory, the simplification of consumer rights can be expected to help drive firms to innovate and compete – a result of more educated and confident consumers empowered to exercise their rights and participate in markets. Through their behaviour in markets, empowered consumers can make a substantial contribution to improvements in business productivity which will, in turn, generate economic growth, employment opportunities and higher real household incomes.

The key findings from the literature are summarised as follows:

- **Simplified consumer law empowers consumers, which leads to positive changes in their consumption behaviour, therefore placing a strong discipline on markets to innovate and compete** – the literature supports the view that as consumers make more informed consumption decisions to seek better deals, this provides a stimulus for new entry, innovation, competition and ultimately growth. For example, better informed consumers with the confidence to engage in markets can be a stimulus to innovation and competition through the following ways:
 - more active and informed consumers who are able to seek redress force businesses to innovate and pursue efficiency¹¹ in order to remain competitive and maintain market share; and
 - this can have a significant impact on the competitiveness of the economy, by acting as a driver for long-term economic growth through intensifying competition among incumbent suppliers and create the incentives for new entry into markets.
- **Increased innovation and competition that result from simplified consumer law will have a positive impact on productivity and economic growth** – informed and empowered consumers who exercise their rights and drive greater innovation and competition provide strong incentives for firms to be more efficient and innovative, thereby helping to raise productivity and growth across the economy. Specifically:

⁹Reduced search costs specifically mentioned in Cseres K. (2006): The Impact of Consumer Protection on Competition and Competition Law - The Case of Deregulated Markets. The benefits to consumers seeking redress are also highlighted in: BIS(2009): Consumer Law Review: Call for Evidence, <http://www.bis.gov.uk/files/file52071.pdf>. The direct link from simplification to improved business awareness and reduced costs is also made in the following: Brennan, C. and Coppack, M. (2008): Consumer empowerment: global context, UK strategies and vulnerable consumers, School of Business, Enterprise and Management, Queen Margaret University & Financial Services Authority focusing on the benefits of consumer empowerment.

¹⁰See Cullum P. (2010): Unleashing the New Consumer Power, Consumer Focus, available at: <http://www.consumerfocus.org.uk/files/2010/10/Unleashing-the-new-consumer-power-WEB-version.pdf>. See also the OFT Consumer Detriments report (2010) which states that “with better knowledge of their rights, consumers can save an estimated £180 a year by making them less vulnerable to scams and ill-advised purchasing decisions”.

¹¹ OECD (2006): Roundtable on Demand-Side Economics for Consumer Policy: Summary Report, available at: <http://www.oecd.org/internet/consumerpolicy/36581073.pdf>; and

BRE/NCC (2007): Warning: Too Much Information Can Harm, by Better Regulation Executive (BRE); National Consumer Council (NCC), available at: <http://www.berr.gov.uk/files/file44588.pdf>

- more empowered consumers working in tandem with better functioning markets (through greater innovation and competition) generate cost savings and efficiencies for businesses and consumers. Cseres (2006) argues that opening up markets to competition does not automatically lead to more consumer benefits. When consumers have insufficient information about the choices they can make or they face high search and switching costs they are not able to take the advantages made possible by effective competition and to activate competition¹². In short, information failures need to be addressed in well-functioning markets for businesses and consumers to benefit;
- these improvements in business efficiency help to raise productivity across the economy and, hence, economic growth. The APC report¹³ shows that the combination of more responsive and innovative suppliers and better informed and more demanding consumers can be expected to invigorate competition and deliver the same type of price and productivity benefits as competition policy, enabling consumers to operate more effectively in markets. The APC study also indicates that *“successful consumer education policies can increase the potency of competition and productivity-oriented policies. In this vein, the direct leverage exerted by consumers on economic activity is huge: final household consumption accounts for about 60 per cent of GDP. Hence, many inquiry participants pointed to the important role of effective consumer policies in ‘activating’ competition and thereby enhancing productivity and growth”*.
- in addition, simplified consumer law can also help businesses to design compliance management processes, which can increase the level of control over wider costs, potentially impacting on profitability. In the long term, such dynamic efficiency gains will eventually be the main driver of economic growth.

2.2.3 Challenges encountered in the literature review

One of the major challenges faced by the study team in reviewing existing literature was the relative paucity of evidence. The ultimate purpose of the literature review was to establish the nature and extent of the relationships between consumer rights and economic growth such that conclusions could be formed regarding the type of impacts likely to result from the simplification and/or clarification of UK consumer rights. However, there have been very few attempts to quantify the likely effects of a simplification of consumer rights on innovation and growth. This dearth of existing evidence and literature was also recognised by Australia’s Productivity Commission¹⁴ which carried out an experimental assessment of the recently adopted harmonised consumer law, the ‘Australian Consumer Law’.

It is impossible to undertake a precise cost-benefit analysis (CBA) of either the individual elements of the Commission’s proposals or the proposed framework as a whole. As far as the Commission is aware, there have been no previous attempts to undertake such analysis of consumer policy as a whole.

The lack of data and evidence has also posed certain difficulties in relation to developing a proposed methodology for assessing the impacts of consumer rights on economic growth. Given that information in that area is negligible, further complexities in the development of an approach for monetising the benefits from a simplification/clarification of consumer rights were somewhat inevitable. Nonetheless, the study team contacted the Australian Productivity Commission which previously developed an estimation model to quantify the

¹² Cseres K. (2006): The Impact of Consumer Protection on Competition and Competition Law - The Case of Deregulated Markets, see the third paragraph on page 21 for example.

¹³ APC (2006): Review of Australia’s Consumer Policy Framework, Australian Productivity Commission, available at: http://www.pc.gov.au/data/assets/pdf_file/0008/79172/consumer2.pdf, See Page 3 for justification of the productivity gains from legislative simplification

benefits of a single Australian consumer law. Such stakeholder engagement helped to inform the study team's findings.

2.3 Case study findings

For additional supportive evidence and to address some of the challenges identified above, the study team undertook in-depth analyses of specific case studies, namely Australia, New Zealand, and the EU Package Travel Directive. These provide factual examples of consumer law having been simplified and the anticipated impacts of these changes on economic growth. Box 2.1 provides a brief description of these policy reforms, which are summarised in greater detail in Table 2.1 below.

Box 2.1 Overview of case study examples



AUSTRALIA – Australian Consumer Law (ACL)

The *Australian Consumer Law (ACL)* came into effect in January 2011. It is a single, national consumer law which replaced 20 national, State and Territory consumer laws. An experimental assessment by Australia's Productivity Commission provides both qualitative and quantitative analyses of the impact of the consumer policy reform by using a simulation method called 'CMOD'. This is an Excel-based model which takes account of the channels through which consumer policy has impacts on consumers, and therefore allows estimating possible benefits and costs from changes in consumer laws. It is discussed in detail in Section 3 of this report.



NEW ZEALAND – The Consumer Guarantees Act 1993 and the Consumer Law Reform Bill

New Zealand has reviewed its consumer laws on various occasions to make them simpler and clearer to consumers and traders. In 1994, the *Consumer Guarantees Act (CGA)* was introduced and replaced NZ's *Sale of Goods Act (SoGA)*. The CGA was designed, in part, to simplify and set out more clearly the rights of consumers and the responsibilities of those who serve them. More recently, in 2011, the NZ Government introduced to Parliament a *Consumer Law Reform Bill* (the "Bill") which would "consolidate five existing consumer law statutes into an enhanced *Fair Trading Act*" and "update the *Consumer Guarantees and Weights and Measures Acts* to strengthen consumers' rights and simplify business compliance." The two key policy drivers behind the Bill are: (1) to promote more efficient regulation whereby NZ's consumer laws are more 'principles-based,' ensuring that consumers are broadly aware of their rights and transact with confidence; and (2) to harmonise NZ's consumer laws with those of Australia, as part of the *Single Economic Market* ('SEM'). New Zealand's review consists of an impact assessment study published in December 2010 and a subsequent supplementary report in February 2011. It does not produce any empirical analysis but uses results published by Australia's *Productivity Commission*'s. This is based on the assumption that the Australian data is likely to reflect a similar situation to New Zealand because the two markets are similar and well-integrated. In terms of quantitative analysis, the New Zealand study applies the *OECD Toolkit* as framework to provide insights for improvements in consumer legislation and facilitates the analysis of business and consumer detriment from not simplifying consumer laws (See Section 3.1). The study provides recommendations which the Ministry of Consumer affairs suggested should be implemented through the Consumer Law Reform Bill.



EUROPEAN COMMISSION – The Package Travel Directive

The European *Package Travel Directive (PTD)* lays down the rules on the liability of travel package providers and sets out consumers' rights in case, for example, of alteration of the package bought. Since the introduction of the Directive in 1990, the market of travel packages has faced deep structural changes, including the increasing number of consumers buying so-called "dynamic travel packages" over the internet from different operators, with reduced reliance on intermediaries like tour operators. As a consequence, it became more difficult for consumers to identify which subject was legally responsible if

the contract was not properly performed. The *European Commission* (EC) therefore considered reviewing the Directive to reflect the evolved market situation. This EC study is survey-based whereby a consumer survey has been used as an evaluative tool for estimating consumer detriment arising from confusing and unclear consumer rights.

Table 2.1 Qualitative and quantitative findings from case studies

Case study	Qualitative outcomes	Quantitative outcomes	Details (Sectors most affected, conditions required, etc.)
Australian Productivity Commission's Review of Consumer Policy Framework (2008)	Identified three most important gains from simplified consumer law: a) reduction in consumer detriment b) increased productivity c) reduced transaction costs.	The reform could provide a net gain to Australians of between \$1.5 billion and \$4.5 billion a year. The Commission estimated the following annual gains from a new policy framework: a) \$ 1.2 billion from reduction in consumer harm b) \$ 0.8 billion due to increased and productivity c) \$ 0.6 billion from decreased transaction costs.	The underlying rationale and assumptions are summarised as follows: <ul style="list-style-type: none"> • A 5 per cent reduction in consumer detriment from the simplification reforms is assumed, based on consumer survey results obtained for the State of Victoria¹⁵ to estimate a reduction in consumer harm. • Equating consumer detriment to household consumption, the reduction in consumer detriment was estimated at \$1.2 billion per year • The rationale is that simplified consumer law decreases consumer risk of detriment by providing them with clearer information on their rights to make more informed decisions and avoid mis-selling. Lower risks would strengthen the trust consumers have in business and products, which would consequently encourage innovation and economic growth. • Predicted reductions in consumer risk were estimated to increase productivity by 0.13 per cent, leading to higher GDP. • If estimated over the longer term, assuming productivity gain are continuous, the predicted increase in productivity over 40 years (in present value terms) is estimated at around \$6 billion. • Further, simplified consumer policy was predicted to reduce transaction costs consumers incurred when exposed to risk (such as search costs). The Commission estimated an annual gain of around \$550 million in reduced costs <p>n The key sectors covered by the proposed changes included financial markets, energy services, telecommunications and the home building industry.</p>
New Zealand's Ministry of Consumer Affairs' Regulatory Impact statement on Consumer Law Reform (2010 and 2011)	The study found evidence of consumer detriment due to out-of-date and overly complex consumer legislation. For each policy option considered, the report discusses several	Most impact measures from policy changes were based on the Productivity Commission's study. However, the Ministry provides its own estimates of consumer harm, although very few of these are monetised. The report suggests that the introduction of proposed	Some of the benefits to consumers from introducing the most favourable option included: <ul style="list-style-type: none"> a) additional protection against unfair practices b) clearer legislation will reduce uncertainty and enable consumers (and businesses) to identify what is allowed and what is not acceptable c) with regards to changes in layby sales market¹⁶, consumer awareness that direct sellers can only call at specified hours will reduce inconvenience and vulnerability

¹⁵ Consumer Affairs Victoria, 'Consumer detriment in Victoria: a survey of its nature, costs, and implications', 2006.

Case study	Qualitative outcomes	Quantitative outcomes	Details (Sectors most affected, conditions required, etc.)
	possible reforms which could be implemented. For some reforms, consumer benefits are estimated. Otherwise, the study relies on the Australian Productivity Commission's estimates to provide an order of magnitude of the anticipated economic impacts of simplifying New Zealand's consumer law.	<p>policy changes would allow consumers to avoid the following costs:</p> <ul style="list-style-type: none"> a) between 5-15% of consumers might experience detriment from unfair contract terms b) 8% of consumers using layby sales had a problem with their transaction c) 16% of New Zealanders experienced problems with direct selling. d) low rates of return on product recalls (less than 5%) e) the cost of the delay of water efficiency labelling regulations by 2-3 years was estimated at \$1 million f) some offences of Fair Trading Act cost consumers up to \$2 million. The cost of prosecuting such offenders cost the Commerce Commission \$3.9 million in 2009-2010. 	<ul style="list-style-type: none"> d) with regards to energy and gas markets, allocating responsibility to the party that has the most control over the cause of breach of quality reduces consumer risks e) increased information will enable consumers to make informed decisions f) less exposure to unsafe products increases consumer safety. <p>Sectors covered by the proposals included energy and gas, layby sales, electronic and second hand vehicles, auctions, charity and supermarkets.</p>
European Union – Revision of the Package Travel Directive. Study on Consumer Detriment in the	The study found evidence of confusion among consumers regarding their rights. For instance, a large majority of consumers surveyed thought that a	Gross yearly detriment in the European Union is €1,065 million Net yearly detriment is €1,005 million, after compensation from service providers paid to consumers for the problems faced. The study focuses on consumer	<p>Structural detriment is due to the lack of clarity on the applicability of the Package Travel Directive: consumers are found to be not aware of the different levels of protection offered by the Directive depending on the type of travel arrangements.</p> <p>The structure of the affected sector has changed substantially over the last 20 years and is highly influenced by the increase of dynamic travel packages (<i>The consumer has purchased two or more items such as flights, hotel, and car hire, the</i></p>

¹⁶A layby sale is one in which the product is paid through one or more instalments, in which the product is held by the retailer until the consumer has paid the full balance within an agreed time period. A deposit of 10-20% of the purchase price is a typical amount initially paid, but the consumer and retailer can agree to a different amount. In the UK this is more likely to take the form of a credit agreement between the retailer and the consumer or through catalogue sales which require consumers to pay in advance for a basket of goods through weekly payments schemes,

Case study	Qualitative outcomes	Quantitative outcomes	Details (Sectors most affected, conditions required, etc.)
area of Dynamic Packages	<p>travel package includes financial protection in cases that are unlikely to include this right. The study suggests that structural detriment¹⁷ is likely to be significant as a consequence of the lack of consumer information over the different levels of protection offered by the legislation combined with the growing importance of the travel package sector.</p>	<p>detriment due to the current problems concerning the applicability of the legislation. This suggests that legislative reform could help avoid these losses and benefit consumers by reducing confusion and detriment.</p>	<p><i>suppliers of these different elements are commercially linked and the elements are bought at the same time. The holiday is put together by the consumer, who decides which elements to add/exclude allowing for a significant degree of tailoring by the consumer¹⁸) and sales over the internet.</i></p> <p>The European Commission announced that by early 2013 an updated Package Travel Directive will be proposed, taking into account the issues related to the purchase of dynamic packages¹⁹.</p>

¹⁷ Structural detriment is the loss of consumer welfare due to market failure or regulatory failure. It considers consumers in aggregate and is based on the ex ante reduction of consumer surplus rather than on ex post outcomes. Personal detriment focuses on ex post outcomes for those consumers who have a negative experience and it may comprise both financial and non-financial detriment. For more detailed definitions, see http://ec.europa.eu/consumers/strategy/docs/study_consumer_detriment.pdf

¹⁸ http://ec.europa.eu/consumers/rights/docs/study_consumer_detriment_dyna_packages_en.pdf

¹⁹ http://ec.europa.eu/consumers/strategy/docs/consumer_agenda_2012_en.pdf

2.4 Summary of key findings

The literature review identified the extent of the theoretical and empirical evidence base for the proposition that simplified consumer rights drives improvements in economic growth. The evidence base is lacking in depth and development – illustrative evidence is identifiable but robust evidence for policy development remains largely limited. As such, few attempts have been made at quantifying the likely impact of a simplification of consumer rights on growth. The evidence suggests that promoting consumer rights is undeniably important for empowering consumers, who subsequently play a key role in prompting businesses to become more innovative, competitive and efficient – hence supporting the growth agenda. However, quantitative evidence to inform and improve policy-making is extremely limited.

Although outside the scope of this study, simplified consumer law will also have a positive impact on businesses. Indirectly, more aware and active consumers ensure that businesses are better informed of their preferences and future needs and, hence, businesses can respond by innovating to better meet customer needs. Directly, improved understanding of consumer law also helps businesses make better decisions, reduce costs and become more competitive and sustainable. EC (2011) and BIS (2009) highlight the importance of business benefits from simplification, demonstrating how it is the effectiveness and efficiency of the whole system which should be considered in any impact assessment.

As such, this study supplements evidence from the literature with international case studies related to the impacts of simplifying consumer law. These studies conclude that consumers would be better off if existing consumer laws were simplified because it would decrease consumer detriment.

For instance, the CMOD model used by the Productivity Commission estimates a net gain of between \$1.5 billion and \$4.5 billion a year likely to be generated from a simplification of the Australian consumer legislative framework. Having assumed a five per cent reduction in consumer detriment from policy reform, the Commission developed the following estimates:

- net avoided direct detriment for consumers of \$1,231 million a year;
- reduction in risk-based transaction efficiencies amounted to \$550 million annually;
- gains from increased innovation and/or productivity of \$842 million a year;
- net gains from reduced business compliance costs of \$98 million; and
- legal and administrative costs amounted to \$24 million.

Given that the New Zealand Ministry of Consumer Affairs' quantitative assessment relied mostly on the Productivity Commission's estimates, it is assumed that similar outcomes to those outlined above will accrue to consumers in New Zealand.

In summary, existing evidence linking simplified consumer rights and economic growth is patchy, with most theoretical and empirical evidence either linking consumer law with direct (short/medium-term) outcomes, such as improved consumer awareness and confidence, or linking these direct outcomes with indirect (longer-term) impacts, such as increased innovation, productivity and growth. However, the scale and nature of the relationship between clearer consumer law and economic growth can, to some extent, be estimated by considering these two types of evidence and impacts in parallel to attribute certain outcomes and impacts to changes in the consumer legislative framework. This evidence is drawn upon in the next section of the report, which develops conclusions regarding an appropriate methodology for measuring the economic impacts of simplified consumer law.

3 Measuring the impacts of simplified consumer law

This section looks at alternative options for quantifying and monetising the impacts of simplified consumer law. It provides an in-depth discussion of the experimental model, CMOD, developed by Australia's Productivity Commission to quantify the benefits of a simplification of consumer law. This section also describes how CMOD might be adapted to the UK and, identifying gaps and/or shortcomings in the model, explores alternative methodologies for measuring the likely impacts of a *Consumer Bill of Rights*.

3.1 Overview

Over the long-term, increased productivity is the key determinant of economic growth and, together with higher employment, is the primary route to higher living standards. There are various ways of quantifying the impact of simplified consumer rights on this long-term prosperity.

Based on the findings of the case studies presented in the previous section, the different approaches to measuring the long-term economic impacts of a simplification of consumer rights are discussed here. Much emphasis is placed on the experimental assessment carried out by Australia's Productivity Commission which has sought to monetise the potential benefits of a simplified consumer regulatory framework. Nonetheless, this model rests on a set of assumptions that are not necessarily applicable to the UK. In that respect, alternative methods are presented.

In structuring an approach to quantifying the benefits of simplification on economic growth, this study has also considered the OECD Consumer Policy Toolkit used in New Zealand and subsequently supported by a companion document indicating how this best practice might be followed to assess the impacts on consumers in Australia (OECD, 2011). A summary of the OECD Toolkit is provided in the box below.

Summary of the OECD Consumer Policy Toolkit (2010)

The OECD Consumer Policy Toolkit is not intended as a methodological tool to assess consumer related benefits, but rather it provides a best practice framework on how to think about and quantify impacts on consumers when formulating policy interventions. A five step²⁰ approach is proposed, which is not dissimilar to the broad steps involved in conducting an impact assessment:

1. Step 1 – Define the consumer problem and its source;
2. Step 2 – Measure consumer detriment;
3. Step 3 – Determine whether consumer detriment warrants policy action;
4. Step 4 – Set policy objectives and a range of policy options;
5. Step 5 – Evaluate options and select a policy action; and
6. Step 6 – Develop a policy review process to evaluate the effectiveness of the policy.

In measuring impacts, the toolkit focusses on the importance of consumer detriment and its different forms (financial, physical, emotional, etc.) on which to base quantification of the costs of non-action and the benefits of policy. National and OECD sources of data for quantification are provided, referencing Australia's CMOD model assumptions in the companion document which could be applied to account for emotional loss, for example. Other than establishing this framework, the toolkit provides little additional information on how the other identified benefits to consumers might be quantified and subsequently evaluated.

Sources: OECD (2010): OECD Consumer Policy Toolkit - Executive summary, available at: www.oecd.org/sti/consumerpolicy/45098058.pdf; and OECD (2011): *Consumer Policy in Australia – A companion to the OECD Consumer Policy Toolkit*, http://www.consumerlaw.gov.au/content/consumer_policy/downloads/Companion_to_OECD_Toolkit.pdf

²⁰ The OECD Toolkit also suggests sixth step which is developing a policy review to appraise the effectiveness of the policy.

3.2 The CMOD model

3.2.1 Overview of the model

CMOD is an experimental Excel-based simulation model developed and applied in Australia in 2008 to quantify the likely costs and benefits from simplification of Australian consumer laws. Developed by the Productivity Commission, the model attempts to quantify the impacts of consumer policy reforms in terms of:

- a lower incidence of consumer detriment (economic and emotional) from unsafe or otherwise defective goods and services;
- lower transaction costs in making purchases resulting from reductions in the time taken to make comparisons and seek reassurance that correct choices are being made; and
- gains from increased innovation.

The first two bullets reflect direct (short-term) impacts and the third bullet the indirect (longer-term) benefits of the reforms. The CMOD model also assesses the net gains from reduced business compliance costs and all legal and administrative costs; however, these aspects are covered in a separate study commissioned by BIS and hence are not discussed further here.

Acknowledging the limited supporting evidence necessary to complete a more precise cost-benefit analysis (CBA) of the consumer policy reforms, the approach taken is highly assumption-dependant and experimental in structure, borrowing heavily from CBA methods applied to product safety policy. The following sub-sections therefore describe how each impact is estimated and the assumptions underlying the results. Further, UK sources of equivalent data and assumptions are proposed, and limitations of the approach are discussed. The CMOD Excel file is available on the Productivity Commission's website²¹. CMOD is just like any other Excel spreadsheet with a list of variables which the user can modify by clicking on relevant cells and inputting more relevant data and/or revising assumptions.

3.2.2 Metrics, methods and techniques used to demonstrate direct (short/medium-term impacts)

3.2.2.1 Consumer detriment avoided

To calculate the consumer detriment avoided due to the simplification of Australian consumer law, the Commission used existing evidence to estimate a baseline level of consumer detriment under existing consumer laws. The Commission used a survey for the Australian State of Victoria conducted by Consumer Affairs Victoria (CAV) in 2006.²² The study team believes that the closest corresponding UK survey is the Office of Fair Trading's (OFT's) 'Consumer Detriment' survey (2008) which provides an estimated overall value of consumer detriment in the UK in 2008 at around £6.6 billion.²³ Inflated to 2012 figures, this equates to £7.5 billion²⁴.

The Commission decreased its figure by 10 per cent to reflect so-called 'innocent detriment' (i.e. detriment that cannot be reduced through a change in consumer law, such as detriment arising from a product fault which could not be avoided entirely despite quality control processes being in place). The baseline level of detriment therefore controls for detriment outside of business and consumer influence. The Commission did not base this figure on any published data or evidence but simply made a 'guesstimate' on the basis of what they felt was an appropriate estimate for the Australian market. The purpose of the assumption is

²¹The CMOD Excel file and a basic guide to running the program are available from Productivity Commission's website: <http://www.pc.gov.au/projects/inquiry/consumer/models/cmmod>.

²² IPSOS, 'Consumer Detriment Survey Prepared for Consumer Affairs Victoria', 2006.

²³ OFT, 'Consumer detriment: Assessing the frequency and impact of consumer problems with goods and services', 2008.

²⁴Using ONS CPI figures from 2008 to October 2012.

to emphasise to policy makers that they should keep in mind the existence of such consumer harm even though its associated impact on overall consumer detriment is relatively low. **Consequently, because there is no firm evidence to assess the degree of ‘innocent detriment’, it is recommended that this be ignored for the purposes of measuring the impacts of a UK Consumer Bill of Rights.**

However, if BIS attempted to exclude such harm from its estimates, it would need to decide by how much to decrease the £7.5 billion estimate of ‘baseline’ consumer detriment. The study team found no comparable estimates of ‘innocent detriment’, although estimates of defect/return rates from consumer products are available, from which a proportion could in theory be attributed to ‘innocent detriment’. In terms of the total volume of products consumers return, in the United States, consumers return on average 8 per cent of all products sold at retail²⁵. In Germany, the average returns quota in general is around 4 per cent, in the electronics and computer industry 10-15 per cent and in online retail apparel up to 40-50 per cent (although much of this will reflect a change in consumer preferences)²⁶. Assuming that defects are included in return rates reported by consumers, and assuming that ‘innocent detriment’ is limited to a subset of the detriment associated with defects/returns, the assumption of 10 per cent appears relatively high. **Consequently, should BIS decide to adjust baseline detriment for ‘innocent detriment’, an adjustment of less than 10 per cent would appear reasonable.**

The baseline estimate of detriment should also include emotional costs²⁷ (such as annoyance and frustration due to breaches of consumer law) not reflected in survey estimates. The Commission assumed that such costs increase detriment by 25 per cent, guided by the findings from the CAV survey. The survey shows that around 50 per cent of detriment experienced by consumers in the majority of categories of goods and services had high or very high emotional impact. This estimate was much higher for building, renovations and repair services at 70 per cent, and lowest for food and drink at 25 per cent. In order to determine the value of emotional costs which might be appropriate in the UK context, the study team looked again at the aforementioned OFT survey (2008) which states that 58 per cent of respondents felt very or at least fairly angry due to consumer detriment²⁸. Although the two estimates (the Productivity Commission’s and the OFT’s) are not strictly comparable, they could both be interpreted as seeking to quantify the emotional impact of consumer detriment. As such, comparing the two shows that the OFT estimate is slightly higher than the Australian estimate of 50 per cent, suggesting that **it might be reasonable to propose an equivalent assumption of emotional costs thereby increasing the UK baseline estimate of consumer detriment by 25-30 per cent to account for emotional costs.**

On the basis of the above, consumer detriment before the simplification of consumer law in the baseline is computed using Equation 1 in Annex 5

The approach then proceeds by expressing the estimated consumer detriment as a percentage of total household consumption in Australia before the simplification of consumer law, as shown in Equation 2 in Annex 5.

Consumer perceptions of risk can overestimate the value of the financial detriment suffered as opposed to gained, consistent with much of the behavioural evidence in the economics

²⁵ Bureau Veritas (2010): Consumer Returns Analysis, available at: http://www.bureauveritas.com/wps/wcm/connect/bv_com/group/home/about-us/our-business/our-business-consumer-products/our-services/cpsdservicesheets/Consumer+Returns+Analysis

²⁶ Unternehmer.de (2009): Online-Handel: Wiereduziert man die Retourenquote?, available at: <http://www.unternehmer.de/online-handel-wie-reduziert-man-die-retourenquote-11773>

²⁷ In its 2006 report: An analysis of the issue of consumer detriment and the most appropriate methodologies to estimate it, it suggests ways to quantify emotional costs (which they term as psychological impacts), These include: (1) court outcomes; (2) consumers’ willingness to pay to avoid (or accept) certain psychological impacts; (3) consumers’ stated preference, i.e., the value that they would place on psychological impacts and (4) experiments where volunteer participants would be asked to choose (implicitly) between avoiding negative psychological effects and receiving a monetary reward

²⁸ The OFT survey reveals that 34% of respondents felt a ‘great deal angry’ while 24% of the respondents’ anger was only to ‘a fair amount’

literature. This evidence cited in the Commission's study includes experimental and real-world evidence gathered from academic articles and behavioural patterns of Australian consumers. To account for this in its assessment, the Commission scales up consumer detriment by 10 per cent. Since it is the perceived risk that influences the effects of policy reforms (the behaviour of consumers is dictated by their perceptions) the increase appears reasonable. The 10 per cent figure itself is not based on any published evidence but it is derived on the basis of the anticipated behaviour of Australian consumers. The study team believes that evidence gathered by the Commission (and presented in Annex B in Volume 2 of its report²⁹) can be applied to the UK market and that the assumption of 10 per cent seems appropriate in the UK context. This adjustment is reflected in Equation 3 of Annex 5.

Regarding **the predicted impact of the reforms on consumer detriment**, the Productivity Commission assumed a 5 per cent reduction in consumer detriment following the reforms in line with the (then) UK Department of Trade and Industry's assumption of a 5 per cent reduction in consumer detriment as a result of the adoption of the European Union Unfair Commercial Practices Directive (UCP).³⁰ The UCP consultation paper and impact assessment also attempted to assess the benefits to consumers from reducing consumer detriment due to the implementation of clearer laws. In the absence of better information, use of the 5 per cent assumption appears reasonable, although more up-to-date literature might be considered, if available.

'If the improved protection that UCPD provides were to reduce these problems by as little as 5 per cent, this could result in a £100 million per year reduction in consumer detriment. While this figure is necessary speculative, it does illustrate the important fact that even a small improvement in consumer protection arising from the UCPD will result in very significant benefits to consumers' (p.13).

Consequently, there is merit in using this assumption in the context of the *Consumer Bill of Rights* impact assessment. The gross benefit from the proposed consumer law simplification is calculated based on Equation 4 of Annex 5.

Some of the apparent benefits to consumers from reduced consumer risk are gross, not net benefits, because they involve transfers from businesses to consumers. This means that there is a cost of forgone income for suppliers associated with the new revised legal regime. The need to adjust consumer detriment for such transfers applies only to monetary transactions, and not to impacts which are not monetised by consumers or businesses, such as emotional costs. The Commission assumes that 50 per cent of pecuniary benefits gained by consumers are transfers from businesses. In the absence of any firm evidence to suggest an alternative estimate, the Commission again made a guesstimate on the basis of what it thought was a reasonable figure. The Productivity Commission adjusts for such transfers on the basis that a 50 per cent share of consumer detriment is repair/replacement costs. The data for the UK on existing consumer detriment only quantifies the monetary costs and can therefore be applied to this methodology.

The Commission estimates the net avoided direct consumer detriment at \$1.2 billion per year from the proposed reforms at 2008-2009.

3.2.2.2 **Transaction and search costs**

Transaction costs include those costs which consumers bear to prevent risks. Such expenses include, for example, the cost of the time consumers spend searching for information on their consumer rights, or in taking out insurance. In that respect, simplified consumer policy will provide clearer laws for consumers to make better decisions decreasing their search time or expenditure on risk mitigation measures such as insurance. This

²⁹ Productivity Commission, Australia: Review of Australia's Consumer Policy Framework Volume 2 http://www.pc.gov.au/data/assets/pdf_file/0008/79172/consumer2.pdf

³⁰ DTI, 'Partial Regulatory Impact Assessment, the Consumer Protection from Unfair Trading Regulations: Implementing the Unfair Commercial Practices Directive', 2007.

therefore suggests that one of the main impacts of policy reforms are transaction cost savings.

Transaction and search costs, usually expressed in consumer or business time, are difficult to measure accurately in monetary terms. In its assessment, the Productivity Commission assumed that the relevant transaction costs to the consumer are around 1 per cent of household consumption. As with some of its other assumptions, the Productivity Commission arrived at this figure based on a guesstimate in the absence of any data/evidence to suggest an alternative figure. On the basis that not all search costs can be related to a reduced risk of detriment, this estimate might be considered somewhat high. However, the transaction costs to the consumer are likely to be higher for goods which are not repeatedly purchased. The reason behind is that consumers need to employ more time and resources when making purchasing decisions about products they either have never bought before or rarely (i.e. new cars, property, holidays).

In the same vein of thought, the Commission points out that in online markets it might be that the transaction costs are now falling given that such markets have found ways of signalling the reputation of providers to consumers much more effectively and efficiently.

In summary, and in the absence of any alternative evidence or data, it appears a reasonable starting point to assume that simplified consumer law could reduce transaction costs by up to 1 per cent of household consumption.

Further, another assumption made by the Commission was that a 1 per cent increase in consumer risk increases these transaction costs by 1 per cent. The only reason given by the Commission for this assumption is that changes in consumer risk have a relatively significant effect on transaction costs. Despite the lack of evidence, the Commission felt that an elasticity value of 1 was a moderate and safe assumption as it implies unit cost elasticity³¹. This means that for a given percentage change in consumer risk will lead to the same proportionate change in transaction costs³². Indeed, it would seem reasonable to expect that transaction costs increase proportionately to increases in consumer risk. **The study team therefore recommends that an elasticity of 1 is applied to the UK market.**

CMOD computes transaction costs using Equations 5 and 6 in Annex 5:

The percentage consumer risk after reforms is computed using a similar method to the one used to estimate the percentage consumer risk before reforms (see above) but the study team uses consumer detriment after reforms (decreased by 5 per cent) and consumption figures after reforms instead. The constant estimate in the equation for transaction costs after reforms is a function of the risk rate and a 1 per cent transaction share assumed earlier. Finally, the **benefit in reduced transaction costs** is calculated by subtracting the post-reform costs from the counterfactual costs (see Equation 7 Annex 5)

The Commission estimated that the gain to consumers from reduced transaction costs were around \$550 million in 2008-2009.

3.2.3 Metrics, methods and techniques used to demonstrate indirect (long-term) impacts

3.2.3.1 Increased innovation/productivity

From a longer term perspective, the Productivity Commission also identified a link between the simplification of consumer law and an increase in productivity, innovation and, consequently, economic growth.

³¹ Unit elasticity is equal to 1 in absolute value

³² A higher elasticity value (> 1) could have been used only if cost elasticity was deemed to be highly-elastic by the Productivity Commission. This would then mean that a given percentage change in consumer risk would have led to a more than proportionate increase in transaction costs. However, the Commission highlights that this change is significant but only to a fair degree

Taking into account the fact that most consumers are risk averse³³, it is likely that consumers will gravitate towards established and trusted businesses as the risk of detriment rises. Such consumer behaviour reduces competition by putting less pressure on existing merchants to compete and, at the same time, reducing the opportunities for new businesses to enter the market. Because merchants are not competing, the innovation effect in the market decreases which in turn weakens productivity growth. In other words, higher consumer risk has a significant effect on consumer behaviour to the extent that it can limit innovation and undermine productivity growth.

The rationale is therefore that greater transparency and consumer awareness (which originate from simplified consumer law) decrease perceptions of risk and thus enable consumers to better act as a competitive constraint on suppliers, providing them with strong incentives to reduce costs, improve their goods and/or services and develop other innovative products. In essence, it is a culture of greater consumer responsibility that encourages the efficient operation of markets as, through their choices, consumers make a substantial contribution to improvements in business productivity. The need to respond continuously to consumer preferences motivates businesses to search for productivity gains and efficiency enhancements in order to maintain market share. Ultimately, it is *“this investment and quest for efficiency which drives innovation and growth in the economy”* (BIS, 2011).

The Commission found that a reduction in consumer risk increased productivity by 0.13 per cent, as explained further below. In the longer term, these productivity gains would be predicted to equate to around AUS\$6 billion over the next 40 years (in present value terms).

Again, the CMOD model is used to estimate productivity and innovation gains from reforms. The function of productivity growth is expressed as an inverse relationship between the productivity rate and consumer risk. This is because as consumer detriment decreases, productivity is likely to increase based on the logic presented earlier and above. This relationship is described by the Commission in Equation 8 of Annex 5.

Following the approach provided in Annex 5 which assumes the baseline level of productivity growth in the Australian economy remains at its historic annual average of 1.75 per cent per year³⁴ (over the last 30 years) and taking lower and higher estimates of the impact of reduced consumer detriment on productivity, the Commission estimates that a reduction in predicted detriment (estimated previously) increases productivity by 0.13 per cent per year on a continuous basis.

A comparable source of data for UK productivity growth is provided by the Office of National Statistics (ONS)³⁵. ONS publishes data on output per worker for the whole of the UK on a quarterly basis from 1960 to the second quarter of 2012. This dataset can be used to calculate a long-term average of annual labour productivity growth rates in the UK over the past 50 years. However, the quarterly figures of labour productivity must first be converted to annual labour productivity growth. In the meantime, the study team used the ONS's calculations of the percentage change of labour productivity per annum which are provided only for the period 1998-2011. The study team obtained an estimate of a UK base rate productivity growth rate of 1.45 per cent. This estimate is smaller than the Commission's figure for the Australian economy but it seems appropriate in the UK context given the impact of the recession on UK economy as reflected by negative productivity growth in years 2008 and 2009.³⁶

³³Luigi Guiso and Monica Paiella have investigated consumers' preferences towards risk and found evidence that risk aversion is an important factor in household's decision making, See 'The Role of Risk Aversion in Predicting Individual Behaviour', Bank of Italy: Economic Research and International Relations Area, 2005. Further, a survey conducted by insurance group FSA on 1,239 individuals in the UK shows that 58 per cent of respondents prefer to be cautious rather than take risks. See RSA, 'Rethinking Risk: Risky Business - How British Business Leaders are reacting to the recession', 2009.

³⁴ This base rate was used by the Productivity Commission in their earlier work on population ageing in Australia and by the Australian Treasury in its Intergenerational Report published in 2007.

³⁵<http://www.statistics.gov.uk/hub/index.html>

³⁶ ONS reports that the percentage labour productivity growth in year 2008 was -1.5 and in 2009 it was -2.4.

Having estimated the increase in productivity due to policy reforms, changes in GDP can be readily computed applying Equation 9 in Annex 5. The percentage change in labour input per capita in this calculation uses the Productivity Commission's Modified Demographic and Economic Model (MoDEM³⁷) program, described further in Annex 5

The Commission finally converts its estimate of GDP impact to consumption values using consumption's share of GDP. This is because the Commission believes it to be a better measure of output to consumers.

In 2008-2009, the Commission estimates increased gain in productivity at \$842 million. This amounts to around 32 per cent of all impacts attributable to the new consumer policy framework.

3.2.4 Impacts over time

A fundamental assumption of the CMOD model relates to its treatment of impacts over time. Specifically, the model assumes that consumers benefit from consumer rights reforms continuously and proportionally to growth in economic activity (i.e. productivity growth and consumer expenditure growth). Therefore, the benefits are anticipated to increase in absolute terms per annum over the entire period.

An alternative viewpoint is that consumers benefit from reforms to consumer rights incrementally, as it takes time for consumers and businesses to adapt and absorb the changes, reflected in the realisation and magnitude of benefits (i.e. in the first year a 2 per cent decrease in detriment could be anticipated, followed by 5 per cent in the next period and so on). If this is the case, then CMOD is likely to overestimate the benefits in the short term.

It is also plausible to suggest that consumers reach a plateau or critical point in time beyond which further benefits are not achievable without further action. In such cases the consumer may adapt to changes in the first instance to a specified point at which further reductions in consumer detriment are limited by the ability of businesses to reduce prices further, the consumer's ability to use the wealth of information and rights afforded to them, and the manufacturers ability to eliminate defects from the production process. Benefits in such cases may not be continuous, but rather limited or one-off in nature.

Consistent with the expectation that benefits are incurred over a lengthily timescale, CMOD does discount future consumer gains. Benefits from reduced consumer risk are computed using future estimates of household consumption which is estimated as a fixed share of future GDP. The future GDP figures are derived from the Commission's MoDEM model. MoDEM is used to calculate population, labour market and GDP projections under different demographic and labour assumptions. Key model outputs include population size, dependency ratios, labour force participation rates, GDP and GDP per capita. The model is relatively easy to use and can be downloaded (together with explanatory notes) from the Productivity Commission's website. Long-run final consumption as a share of GDP is expressed as an average of yearly consumption shares of GDP where a consumption share is defined as annual final consumption share/annual final GDP. This has been calculated for each year using historical data (1959-2007). The average of all years is then used to compute future final consumption using future GDP data estimated in MoDEM. The future gains from reduced consumer detriment are then estimated for each year. The net present value of these gains in 2008-2009 have been obtained by adding all future gains (2008-2053) discounted to year 2006-2007.

Applied to the UK, GDP projections can be found from a variety of sources from ONS, OBR, to World Bank, OECD and Eurostat estimates. More complex is the modelling of longer-term impacts which are only partially assessed in CMOD in a relatively static framework, although productivity benefits are considered continuous. A static framework is only a concern if the model estimates are relatively significant in relation to the wider economy. For example, the direct impacts need to be significant enough to induce measureable impacts in subsequent

³⁷ The updated version – MODEM 2 – is also available

time periods on business investment, innovation or consumer expenditure (from savings made in the current period) for the dynamic impacts to be worth assessing. Equally the inputs to any macroeconomic approach adopted (see below) must be significant enough to be picked up in the model outputs, given the ‘noise’ of the rest of the economy, not attributable to simplification. As a guide, the authors recommend the policy maker should only consider the absence of a more the dynamic approach an issue if the direct impacts are in the order of tens of millions of GBP or more. More sophisticated macroeconomics models should be considered in this regard (discussed further in the following section), providing the opportunity to model the full impact of price changes, shifts in consumption and of innovation on economic growth, accounting for feedback and induced effects.

3.2.5 Summary and conclusions

The Australian Consumer Law came into effect in January 2011 replacing 20 national, state and territory laws. The Productivity Commission’s study identified the three most important gains from this simplification of consumer law:

- reduction in consumer detriment;
- increased productivity/innovation; and
- reduced transaction costs.

The biggest gain to Australian consumers from the policy reforms come from decreased consumer harm (47 per cent), followed by benefits from productivity and innovation growth (32 per cent), and risk-based transaction efficiencies (21 per cent). Table 3.2 below is a summary of all the impacts estimated by CMOD (in present values and percentage values of total impact), identifying which are likely to have short term effects, and which are to be identified over the longer-term.

Table 3.2 Summary of impacts of new consumer policy framework

Impact	Short term	Long term	Present value (\$bn)	% total impact
Consumer detriment	✓		20.5	47%
More efficient transaction costs	✓		9.2	21%
Increased productivity and innovation		✓	14.0	32%
Total			43.7	100%

Source: Productivity Commission (2008).

3.2.6 Applying CMOD in the UK context

CMOD is a useful tool which could facilitate the quantification of costs and benefits of the introduction of a *Consumer Bill of Rights*. Having gained a good understanding of the CMOD methodology, the study team believes it can be applied to the UK.

A step-by-step description of the model and how it was used to estimate the main impacts of simplified consumer law was provided above. Most of the data needed to run CMOD simulations for the UK is available. Table 3.3 below provides a summary of UK equivalent data sources which could be used by BIS to run the CMOD model in order to estimate the costs and benefits of the introduction of *Consumer Bill of Rights*.

Table 3.3 Suggested UK equivalent data sources

Measures used	UK equivalent data sources
Existing consumer harm, emotional costs estimate	OFT’s ‘Consumer Detriment’ survey (2008)
Perceived risks	Evidence gathered in Annex B in volume 2 of Commission’s report
Innocent detriment	Bureau Veritas (2010), Unternehmer.de (2009)

Measures used	UK equivalent data sources
Household consumption	Office for National Statistics: National Accounts datasets
% decrease in consumer detriment	BERR, 'Implementation of the Unfair Commercial Practices Directive' (2008)
GDP, population, labour inputs, labour productivity	Office for National Statistics: National Accounts datasets

Table 3.4 below summarises the assumptions used for the Australian market, the reasoning behind them, and suggested UK equivalent assumptions. The study team has discussed these assumptions with the Commission which has provided further clarity on the reasoning behind them. However, many of the assumptions were not based on any published data or evidence but the Commission simply made guesstimates based on what they believed to be reasonable estimates for the Australian market. The study team has sought any additional research to fill these gaps but in some cases the assumptions will have to remain indicative and speculative and BIS will have to decide on what it thinks is the most appropriate assumption(s) to make in the context of the *Consumer Bill of Rights*. This is likely to be the biggest challenge BIS faces if seeking to apply the CMOD model.

Table 3.4 Summary of CMOD assumptions

Impact	Factor	Assumptions	Evidence/rationale	UK equivalent assumptions
Consumer detriment	Innocent detriment	10% decrease	To account for the fact that existing consumer detriment might include detriment which cannot be reduced through changes in consumer law. No evidence provided – based on indicative/speculative assumption only.	Anecdotal evidence suggests the percentage could be lower.
	Emotional costs	25% increase	CAV survey	OFT's survey (2008) which suggests a decrease of 25-30%
	Perceived risks	10% increase	Behavioural evidence in the form of articles and real-life observations of consumer behaviour	The same assumption applies
	Reduction in consumer risk	5% decrease	BERR (2008)	BERR (2008)
	Transfers from businesses	50% decrease	50% of monetary gains to consumers are transfers from businesses. No evidence provided – based on indicative/speculative assumption only.	In the absence of additional evidence, BIS may consider using the Commission's assumption.
Transaction costs	Search costs	1% of household consumption	Not all search costs relate to misconduct and those that do are likely to be small.	Apply 1% of household consumption if UK is considered as a whole but this estimate can be higher for goods seldom purchased
		1% increase	Cost elasticity equal to 1	Cost elasticity equal to

Impact	Factor	Assumptions	Evidence/rationale	UK equivalent assumptions
		in consumer risk increases transaction costs by 1%		1.
GDP growth	Productivity and innovation	Base level productivity rate is 1.75%	Productivity Commission's report on ageing (2005) and Treasury's Intergenerational Report (2007)	An estimate of 1.45 based on ONS labour productivity annual growth rates

If adopting the CMOD model, consideration should also be given to its limitations. While CMOD provides a good quantification of the short-term impacts identified in the literature review, it only partially assesses the longer-term impacts. Productivity changes from innovation are the only real link made to economic growth. Wider indirect and induced effects are neglected in this approach. However, these could be quantified by using alternative measures described in the following section.

3.3 Alternative approaches for measuring impacts

This section sets out other approaches and analytical techniques to help monetise the short-term and longer-term term effects associated with simplified consumer law. The aim is to build on, and address the limitations of, CMOD in order to provide BIS with a more robust methodology to help measure and monetise the impact of simplified consumer rights.

3.3.1 Alternative methods for measuring direct (short/medium-term) outcomes

Provided below are a range of alternative metrics and measures that could be used to capture the key short-term outcomes of simplified consumer law identified in the intervention logic and those which are not addressed extensively by the CMOD, including:

- more consumers aware of and understand their rights;
- more consumers empowered to exercise their rights / more consumers exercising their rights; and
- more consumers confident of participating in markets.

This is followed by a description of the methods and techniques for informing the metrics and measures.

3.3.1.1 Metrics and measures

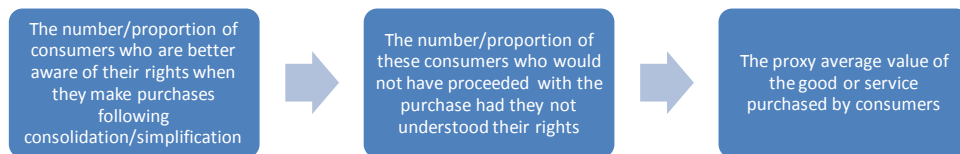
There are a number of metrics and measures that can be used to capture these short-term outcomes, including:

- **More consumers aware of and understand their rights.** More accessible and straightforward consumer rights should help to increase the efficiency with which consumer detriment is 'dealt with' by speeding dispute resolution, reducing staff training costs and making litigation less likely.

These impacts are challenging to monetise, but one approach is to measure the following benefits to consumers:

- **reduced transaction and search costs** in people not searching for their rights, which can be calculated based on assumed time taken to search for information on their rights;
- **time savings delivered** through greater understanding and exercising of consumer rights (e.g. time savings associated with being able to deal more efficiently with faulty goods/poor service);

- **money saved from avoiding mis-buying products.** For example, this could be the number of times per annum that consumers who previously did not understand their rights mis-purchased products and the average costs of these incidents; and
- **money saved avoiding scams and ill-advised purchasing decisions** as a result of better awareness and understanding of their consumer rights.
- **More consumers empowered to exercise their rights / more consumers exercising their rights.** The benefits resulting from more consumers being empowered to exercise their rights may be monetised by estimating the change in the number of small claims made by consumers in civil court (proxied by Ministry of Justice figures on small claims made below £5,000 available online on a quarterly basis). However, an assumption would be required should these figures not identify the reason for the claim being made. Equally, it would be challenging to determine whether an increase in small claims is due to more consumers exercising their rights (for a given level of consumer detriment) or whether the increase reflects an increase in consumer detriment.
- **More consumers confident of participating in markets.** This could include the value of additional purchases linked to consumers being more aware of their rights, not dissimilar to an approach taken by ICF GHK in an evaluation it completed for the OFT to try and estimate the consumer benefits of new cancellation rights in the doorstep selling market³⁸.
 - Additional value of purchases that would not otherwise have been made, including:



- As a result of improved knowledge of rights consumers are better equipped to shop around and compare prices to obtain a better deal. This will also result in a reduction in time costs / monetary savings associated with switching.

3.3.1.2 *Methods and techniques*

Set out below is a brief description of the key methods and techniques for informing the metrics and measures outlined above.

- **More consumers aware of and understand their rights:**
 - Seek data (either via literature or via consumer panels/focus groups/surveys) on the time consumers spend searching for information on their consumer rights and estimate how this might fall with simpler framework of consumer law.
 - Consumers could also be surveyed about their awareness, however this will be difficult to monetise as part of an ex ante Impact Assessment.
 - Seek data to capture the reduced consumer detriment via avoided purchases of inferior goods, including gathering published evidence on the average value of returned, cancelled and refunded goods and services.
- **More consumers exercising their rights:**
 - Gather published evidence on the average value of returned/cancelled/refunded goods and services and consider the extent to which this might change as a result of more informed consumers.
 - Consumer survey and consumer panels

³⁸ OFT 2012, Evaluating the impact of the 2004 OFT market study into doorstep selling, Prepared for the Office of Fair Trading by GHK, OFT1413, April, available at http://www.of.gov.uk/shared_of/reports/Evaluating-OFTs-work/oft1413.pdf.

- **More consumers confident of participating in markets:**

- Seek data through a consumer survey on their changing levels of confidence and subsequent levels of participation as a result of simplified consumer rights
- Review ONS consumption data, e.g. quarterly consumer trends data such as the Household Final Consumption Expenditure (HHFCE) for the UK.

An important consideration in applying these methods, acknowledged by the Productivity Commission, is that quantifying each impact aspect separately is prohibitively difficult and risks double-counting between impacts, but also with the CMOD model, which assesses the entire package of measures and impacts together (i.e. estimation of the value of returned goods). **These techniques may therefore be better suited to providing supplementary or illustrative evidence on the scale of impacts, rather than as a substitute for CMOD.**

3.3.1.3 *Timing considerations*

Evidence in the literature highlights the uncertainty in relation to the timeframe over which simplified law can be expected to deliver observable differences in consumer assertiveness. However, there are a number of examples of awareness-raising campaigns and subsequent evaluations that can be drawn upon to estimate an appropriate timescale.

For example, in November 2009, the OFT launched a campaign ('Your Doorstep, Your Decision') to raise awareness of how to handle doorstep sales tactics and the risks of rogue traders. The majority of the awareness raising activity took place in early 2010 and an evaluation was carried out a year later in January 2011, suggesting impacts are fairly instantaneous.

Consequently, it might be concluded that within 12 months of the introduction of the *Consumer Bill of Rights* (assuming an appropriate awareness-raising campaign takes place), it should be possible to measure the impact on consumer awareness and understanding of their rights, with the impact on consumers exercising their rights and participating in markets potentially observable beyond that timeframe. Specifically, and consistent with HM Treasury Green Book guidance, it is proposed that a post-implementation review take place no sooner than 3-5 years following the introduction of a *Consumer Bill of Rights* to maximise the likelihood that direct and indirect impacts can be observed and measured.

3.3.2 *Alternative approaches to measuring indirect (long-term) impacts*

Reflecting on the limitations of the CMOD model in evaluating the longer-terms impacts of simplified consumer law, this subsection examines the possible alternative approaches which could be considered in parallel to CMOD to take the analysis a step further. Consideration is given to the strengths and weaknesses of these approaches relative to CMOD and makes recommendations as to how longer-term impacts on growth (measured as a proportion of GDP) can be expressed most robustly and reliably.

This section considers three alternative approaches:

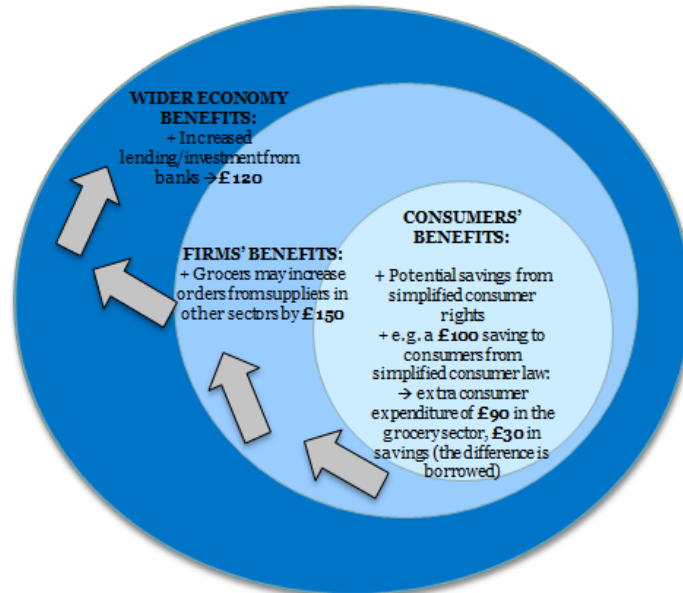
- Input-Output (IO) tables;
- Computable General Equilibrium (CGE) models; and
- Macro econometric models.

3.3.2.1 *Input-Output tables*

Input-Output (IO) tables provide a matrix representation of the economic structure of the economy by showing the interactions between different economic sectors. Changes occurring in a single sector can therefore be traced to changes in all other sectors of the economy and quantified. The components of final demand (consumption, investment, international trade) are frequently added to this framework providing a more complete model accounting for imports/exports and inward/outward investment. IO tables form the basis for most of the formal models described later in this section and economic multipliers can be derived from IO tables directly to show supply-chain effects (Figure 3.1). Multipliers provide a shorter and simplified representation of these effects based on IO tables:

- Type I multiplier: obtained by inverting the IO table, this shows the impact of interactions between sectors; and
- Type II multiplier: obtained in the same way, but adding household effects (i.e. including the feedback impacts of changes to expenditure/investment on household incomes).

Figure 3.2 Supply chain multiplier effects



Generally, IO tables are only used for understanding past relationships rather than for forecasting or policy analysis. There are no behavioural relationships involved beyond the fixed coefficients in the IO table and prices do not feature at all. IO is consequently limited to estimating order of magnitude impacts, providing little additional insight or robustness over the CMOD approach.

The other major drawback to IO analysis is that it is fixed in the year for which the IO tables are available, and these are often quite dated. Static in nature, it does not account for the continued dynamic impacts described in the example above (e.g. greater spending in one sector leads to increased employment/investment and consequently consumer expenditure in the next period). IO tables are also not able to assess behavioural reactions or economies of scale which could be significant in the context of consumer law simplification.

Nevertheless, given its flexibility and simplicity (the only input required is the IO table itself); the approach does have merits as a precursor to more comprehensive analysis, or to supplement the outputs of CMOD, testing the reliability of outcomes. Using multipliers in this way presents outcomes in pound sterling values, which can be reported as percentage changes in GDP consistent with the other approaches.

3.3.2.2 Computable General Equilibrium (CGE) models

CGE models establish a set of prices for which all markets of the economy are in equilibrium, implying that resources are allocated efficiently. The parameters and coefficients of the model are then calibrated in the model using mathematical methods and a single base year of data. Econometric methods are not usually applied, although they can be used to derive some of the parameters.

The developed model can then measure a shift away from this vector of equilibrium prices in one market on other markets as prices and output readjust to a new equilibrium point. Using IO tables to model interactions between productive sectors and national accounting data, quantitative estimates of the economic impacts are derived. As the name suggests, a 'general' model covers the whole economy and is capable of including all the feedbacks from consumption, investment and trade.

The CGE model provides a consistent framework for carrying out analysis of longer-term impacts through simulations based on predicted or actual changes in price and consumer behaviour derived when assessing the shorter term impacts of simplified consumer law. This approach is also underpinned by strong neoclassical economic theory and microeconomic foundations. Since models are calibrated to a base year, data requirements are minimal, even if disaggregation is high, a key advantage where quantitative information is at a premium. This allows for the evaluation of distributional impacts between sectors, regions, etc. which may be important if legal changes are expected to have a greater impact in certain consumer sectors compared to others (i.e. electrical versus clothing retail, or high street versus internet and digital sectors).

The weakness of CGE models is that the results can be highly dependent on the assumptions and calibrations made. These include aspects of neoclassical theory that have increasingly been questioned. In particular, the use of a rational agent with perfect knowledge and foresight is questionable and few product markets in reality are perfectly competitive, in which case they are not in equilibrium. Savings to consumers in this context can therefore be underestimated if it is assumed that improved rights lead to shifts towards more competitive markets. The market failures not accounted for in CGE models can include non-competitive markets, externalities and asymmetric information (i.e. differences between relative consumer and business knowledge). However, quantifying what difference this makes to the results of CGE approaches is rarely undertaken.

In general, the characteristics of CGE models make them better suited to the evaluation of general economic policies like taxation and social policy, and their impact on longer term change as, overtime, it is more realistic to represent the economy as being in equilibrium. Consequently, CGE models are rarely used for short and medium-term analysis because it is widely accepted that adjustments (or transitions) take time and that market imperfections are more likely to emerge in the short and medium-term. Use of these models would require the use of short-term outputs from CMOD (as changes in prices and consumption) which can input into a CGE framework, enabling feedback and induced effects to be quantified. Impacts are reported in pound sterling values or as a percentage of GDP.

When using CGE and macro-economic models to assess the impact of increased competition, assumptions need to be made regarding the extent to which markets were functioning imperfectly in the first place, in order to assess to what extent prices are expected to decrease from greater competition or productivity would increase as the market readjusts to a more competitive equilibrium (in the case of CGE). Inputting data into both types of model can therefore be difficult, requiring possible interpretation of the CMOD outputs into macro model inputs.

CGE models of the UK economy which could, in theory, be applied to assess the longer-term impacts of consumer rights reforms include models developed by HMRC³⁹ and by Oxford Economics (i.e. the OEIM model).

3.3.2.3 *Macro econometric models*

Macro econometric models are empirically based and derive their behavioural assumptions from large-scale datasets, applying econometric methods to determine the relationship between key variables (based on current and past behaviour as opposed to assumed rational behaviour). Unlike CGE models built from microeconomic principles, these models are fundamentally developed to evaluate macroeconomic and sectoral impacts of economic policies.

As these models are based on statistical methods and time-series data, their ability to provide short-term forecasts is strong, given that the model parameters are based predominantly on previous data. However, the weakness of this approach is longer term phenomena are more difficult to evaluate as the equations specifying the relationship between sectors is associated with a specific period in time. Due to higher informational

³⁹The HMRC Computable General Equilibrium Model

requirements (i.e. long time series rather than a single base year), sectoral disaggregation is also often smaller than in partial or CGE-type modelling approaches.

Although this type of model does not rely on the limiting assumptions present in a CGE model, it does assume that historical behavioural relationships do not change over time. This has been criticised in the past, suggesting that an agent's behaviour should not be exogenous to its surroundings. Consequently, these models tend to be viewed as more powerful in the short and medium-term than in longer-term analysis.

When considering the results from econometric models, it is necessary to check the key assumption of past relationships holding into the future. There are three key variants to this:

- Is the model looking so far ahead that we cannot say that things will not have changed?
- Have there been any 'structural breaks' (events that may have caused behaviour to change)?
- Could the scenario inputs themselves have changed behavioural responses?

In this context it is not difficult to see why the use of econometric models is more common in short and medium-term analysis, while CGE models are typically used for long-term assessment. The benefit of applying econometric models to CMOD outputs is that they can provide a useful assessment of the dynamic impact of consumer law reforms over the medium to longer-term, accounting for changes in consumer behaviour observed over that period and reflected in its various parameters. This would therefore be considered as the preferable approach to providing a more comprehensive assessment.

The most commonly adopted macroeconomic model in the UK is Cambridge Econometrics' UK Multisectoral Dynamic Model - E3 (MDM-E3). The study team will confirm with Cambridge Econometrics the applicability of MDM-E3 prior to final reporting and confirm the key assumptions which would need to be made in order to use the outputs of CMOD.

3.4 Summary of key findings

The CMOD model developed by the Australian Productivity Commission provides a useful approach for quantifying the economic impacts anticipated from the simplification of consumer law. Experimental in nature, however, CMOD is restricted by:

- arbitrary assumptions which are not always based on reliable evidence;
- a static approach to the analysis, ignoring dynamic impacts: and
- a limited ability beyond productivity impacts to assess longer-term impacts on economic growth (i.e. through spillover and induced effects).

Nevertheless, CMOD should be considered a useful first step in the quantification of relevant impacts for impact assessment and evaluative studies, provided appropriate caveats are introduced and made clear in any reporting.

Examining the assumptions used by the Productivity Commission in its analysis, this report has concluded that in a UK context:

- innocent detriment should not be quantified and where it is quantified should account for less than 10 per cent of consumer detriment;
- productivity estimates should be based on an historical average of 1.45 per cent annual productivity growth in the UK between 1998 and 2011, opposed to 1.75 per cent used by the Productivity Commission; and
- equivalent UK data sources should be applied where available. Namely, the OFT's 'Consumer Detriment' survey (2008) and the most recent Office for National Statistics data should be used to populate the model.

The remaining assumptions should be applied unchanged from the Productivity Commission's model run, described above.

Where dynamic and longer term impacts are expected from the legislative changes proposed, the study recommends that supplementary analysis is undertaken. Three approaches are considered:

- Input-Output(IO) tables and multipliers;
- Computable General Equilibrium (CGE) models; and
- Macro econometric models.

Whilst IO tables are simple to use and provide an order of magnitude estimate, IO tables add little to the CMOD analysis and remain too simplistic to capture many of the induced effects on economic growth.

CGE models are a feasible alternative, but suffer from limiting assumptions around the behaviour of actors, reducing their effectiveness in short and medium term estimation. Macro econometric models are consequently considered the most appropriate for this study. However, care should be taken when using the results of CMOD as inputs into these models as data may require interpreting into equivalent changes in energy supply/demand conditions.

Finally, other metrics and measures should be considered as adding value to the analysis, by providing a sense check on the quantified impacts from the approaches described above, and also contributing to the overall evidence base for impact assessment.

4 Conclusions

4.1 **There is strong literature based evidence supporting the hypothesis that increasing consumers' awareness and understanding of their rights and redress mechanisms will stimulate competition, productivity, and innovation, but there is no quantitative assessment of these links. There is also limited evidence directly linking simplified rights to positive impacts on economic growth.**

The theoretical, empirical and policy-related literature supports the overarching hypothesis that simplified consumer law has a positive impact on wider economic outcomes, including economic growth. However, due to the limited availability of literature explicitly relating to consumer law (as opposed to legislative simplification more generally), the strength of evidence varies depending on the relationship assessed. The strongest evidence supports the more direct (short and medium term) relationship between the simplification and consolidation of consumer law leading to more empowered consumers, who are confident and willing to exercise their rights.

Limited evidence was found to support the indirect (long term) links between simplified consumer rights, consumer awareness and economic growth. Further, the literature indicates that for simplified rights to have a significant impact on consumer awareness, other factors such as consumer education, knowledge and awareness raising measures should operate in tandem with simplified rights⁴⁰. The literature also shows that the behaviour (preferences) of consumers and their associated rationality is highly uncertain and fragmented, such that other factors may restrict consumers' ability to make well-informed and confident purchasing decisions. These issues were highlighted in a number of case studies relating to Australia, New Zealand and the European Union (EU).

Nevertheless, active consumers with the confidence to engage in competitive markets were found to have a positive impact on intensifying competition and innovation⁴¹ which should lead to increased productivity and economic growth in the longer term.

Despite recognition in the literature of the linkages between simplified consumer law and the wider economic benefits for competition, innovation and growth, these links are rarely quantified or monetised in the literature. This is a clear evidence gap which, if addressed, would support more reliable and robust policy development and ex ante appraisal.

4.2 **Case studies showed that other countries have reached similar conclusions regarding the impacts of consumer law simplification, but only the Australian Productivity Commission has attempted to quantify these impacts**

As outlined in sections 2 and 3, the CMOD model developed by Australia's Productivity Commission has been the only attempt, to date, at quantifying the benefits likely to be derived from a simplified consumer regulatory framework.

This experimental assessment identifies 'visible' as well as 'invisible' impacts (to consumers) of a unified consumer legislative framework (a broader picture is depicted in Annex 4).

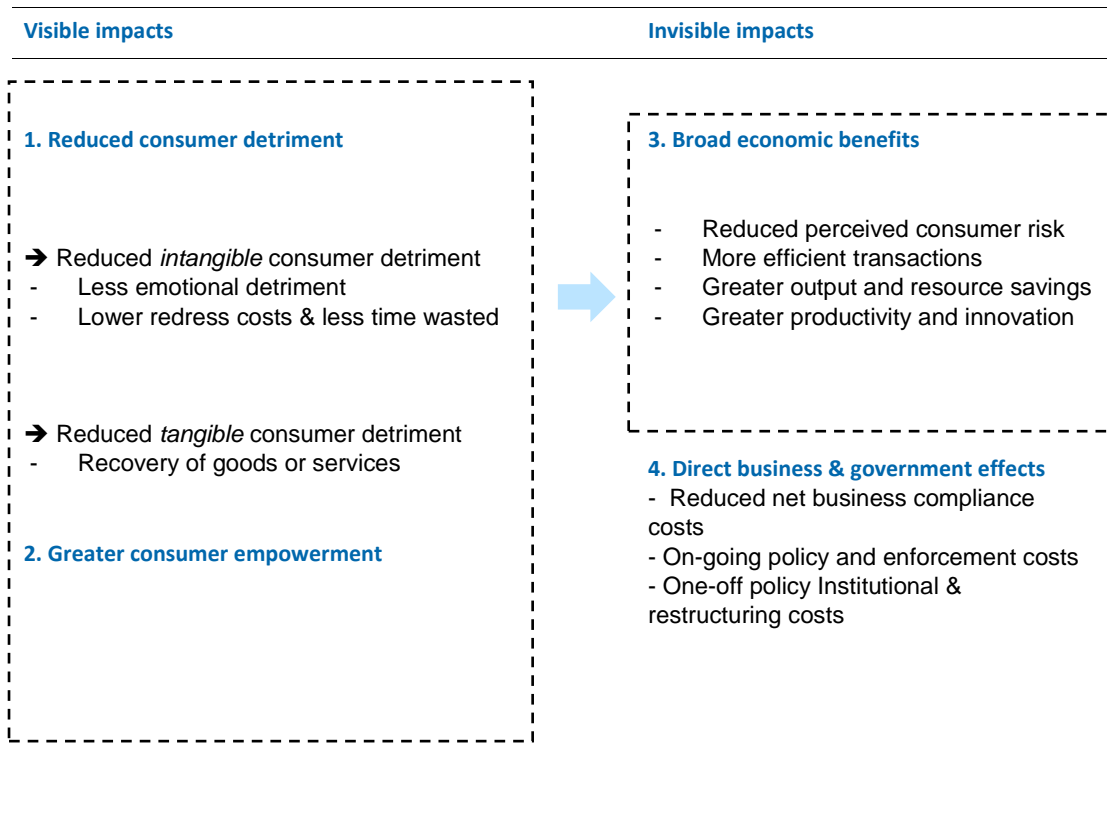
Visible impacts will take the form of: (1) reduced consumer detriment; and (2) greater consumer empowerment. These visible impacts will have broader economic benefits in the long term, which will however be 'invisible' to consumers. Other invisible impacts include direct business and government effects.

⁴⁰ Consumer Focus (2010) *Unleashing the new consumer power*

⁴¹ Consumer Empowerment in the EU, Commission Staff Work Paper (2011)

Table 4.1 outlines the different ways via which visible and invisible benefits are generated as a result of simplified consumer legislative framework.

Table 4.1 Visible and invisible impacts to consumers



These impacts have also been quantified by means of a CMOD simulation, which estimates the potential net gain to Australian consumers of \$2.5 billion a year, composed of the following from a new policy framework:

- \$ 1.2 billion from reduction in consumer harm;
- \$ 0.8 billion due to increased innovation and productivity; and
- \$ 0.6 billion from decreased transaction costs.

4.3 The proposed methodology for measuring the impacts of a Consumer Bill of Rights is an adapted CMOD Australian model more applicable to the UK context.

The CMOD model developed by the Australian Productivity Commission was found to provide the most useful approach to quantifying the economic impacts anticipated from the simplification of consumer law, specifically in the short- and medium-term.

CMOD provides a structured approach to estimating:

- a lower incidence of consumer detriment (economic and emotional) from unsafe or otherwise defective goods and services);
- lower transaction costs in making purchases resulting from reductions in the time taken to make comparisons and seek reassurance that correct choices are being made; and
- gains from increased innovation.

Usefully, CMOD is available online and in MS Excel format, making it user-friendly and easy to adopt by BIS.

The following adjustments should be made to the assumptions underpinning CMOD:

- innocent detriment should not be quantified and, if it is quantified, should account for less than 10% of consumer detriment;
- productivity estimates should be based on an historical average of 1.45% annual productivity growth in the UK between 1998 and 2011; and
- equivalent UK data sources should be applied where available. Namely, the OFT's 'Consumer Detriment' survey (2008) and the most recent Office for National Statistics data should be used.

The remaining assumptions should be applied unchanged from the Productivity Commission's model run, described in Section 3

4.4 The Australian CMOD model should be supplemented with macroeconomic modelling where the direct impacts are anticipated to have significant longer term impacts on consumer expenditure, business investment and innovation.

The CMOD approach was found to have limited ability in the quantification of longer-term impacts beyond productivity benefits, partly due to its static approach to the analysis and its inability to account for spillover and induced effects on the wider economy resulting from direct impacts on consumers and businesses. Three alternative approaches to accounting for these longer-term impacts were considered to supplement the outcomes of CMOD. These approaches include:

- Input-Output (IO) tables and multipliers;
- Computable General Equilibrium (CGE) models; and
- Macro econometric models.

Macro econometric models are considered the most applicable in this context, given that they are built on empirically-derived foundations to account for a lack of rationality in consumer behaviour and changes which have occurred in the economy (i.e. the current economic crisis), the inability of which limits the applicability of other approaches such as CGE models. These dynamic models account for induced and spillover effects from innovation, investment and household expenditure, important in the context of consumer rights.

However, care should be taken in using the results of CMOD as inputs into these models can often require translation of direct impacts. Typically, this involves translating direct benefits into an equivalent change in energy prices or change in demand/supply conditions. Impacts of the proposed changes to consumer law on businesses should also be factored in to such models if the net outcome on consumers is to be assessed reliably and robustly.

Finally, other measures and metrics are a useful source of supplementary evidence to support impact assessment. Measures such as time saving by consumers, the number of consumers participating in markets, lower search/transaction costs, and consumer switching rates are all identified as useful additional sources of evidence on the benefits of simplified consumer rights.

ANNEXES

Annex 1 Literature review methodology

A1.1 The search strategy

To guide the search process, emphasis was placed on the hypotheses formulated in the intervention logic. Specific review questions were addressed which enabled notable sources of material to be identified including theoretical, empirical and other evaluative information. Complementary web-based searching also helped to fill intermittent gaps. Table 2.1 provides a brief outline of the research process.

Table A1.1 The approach undertaken to review the literature

Review questions	Additional search criteria	Identified sources
<p>The review questions were as follows:</p> <ul style="list-style-type: none"> ■ What impact does simplified consumer rights have on consumer understanding/awareness of their rights? ■ What impact does a harmonised/generic/single consumer law have on consumer understanding/awareness of their rights? ■ What impact does improved understanding/awareness of consumer rights have on consumer behaviour in markets/community/the economy as a whole? ■ What impact does improved awareness of consumer rights have on consumer confidence when participating in markets? ■ Does improved consumer confidence as a result of a simplification of consumer rights lead to efficiency, innovation and growth? ■ What are the linkages between simplified 	<p>Where an initial search (based on the review questions) did not identify sufficient literature and evidence, a further web-based search exercise was undertaken with the use of simpler and more succinct key terms. For instance, these included:</p> <ul style="list-style-type: none"> ■ ‘Simplification of consumer rights and economic growth’; ■ ‘Harmonisation of consumer law and consumer behaviour’; ■ ‘Generic consumer law and innovation/growth’; ■ ‘Clarity of consumer rights and consumer behaviour’; ■ ‘Simpler consumer rights and consumer awareness/consumer confidence’; ■ ‘Increased consumer confidence and economic growth’; and ■ ‘Increased consumer awareness and innovation/economic growth’ 	<p>Several sources of theoretical and empirical literature were identified:</p> <ul style="list-style-type: none"> ■ Academic journals (e.g. peer-reviewed journal articles and non-peer-reviewed academic research); ■ Grey literature (e.g. government reports, working papers, public speeches, consultations, conference proceedings); ■ Online databases (e.g. EBSCO); ■ Studies produced by intergovernmental bodies (e.g. the OECD); ■ Studies conducted by research institutions, think-tanks and consumer organisations (e.g. Consumer Focus, the National Consumer Council) <p>A substantial amount of information was also drawn from governmental sources at the national, EU and international levels. These include:</p> <ul style="list-style-type: none"> ■ Impact assessments (e.g. Department for Business, Innovation and Skills); ■ Government-

and better understood
consumer rights and
innovation/economic
growth?

commissioned research
(e.g. Office of Fair
Trading, Australia's
Productivity Commission);
and

- European Commission
directorates (e.g. DG
SANCO)

Annex 2 Literature review data extraction form

A2.1 Inclusion/exclusion criteria

The table below relates to inclusion criteria and relevance assessment used for data extraction. Categories were derived from the specific review questions and used to identify and review literature.

Table A2.2 Data extraction form for the review of literature

Reference	Reference number
	Study title
	Author/consultancy
	Year
	Institution
Study purpose	Purpose
	Geographic scope
	Link
Review of methodology	Methodology (empirical, model, survey, lit. review)
Research categories	Consumer rights, awareness/understanding and empowerment
	Consumer rights, consumer understanding/awareness and consumer behaviour
	Consumer rights and consumer participation in markets
	Consumer rights / law & economic growth / innovation
	Consumer empowerment / confidence & economic growth / innovation
	Consumer redress , confidence and economic growth
	Consumer rights / law & competition, economic growth
Key word search	E.g. Consumer rights, redress, empowerment, awareness, simplification, competition, etc.
Reliability of evidence	E.g. statistically representative survey, peer reviewed?, audience, etc.

A2.2 The review protocol

The study team searched for material using the review protocol. First, a full and comprehensive stock of publications was accumulated. Bibliographic information and a very brief description of studies were recorded within a database. The review team then took the full list and carried out a second screening process using a quality and relevance assessment. Only the most relevant literature material was thus retained. The next stage involved a fuller reading of the included literature. At the heart of the process was the recording of content from the literature, using a 'data extraction' template (see sub-section A2.4). A data extraction template reduces inconsistencies and improves validity and reliability. It sets a number of categories of information to focus upon during reading. Categories were derived from the specific review questions (as outlined in Section 2).

A2.3 Collation of literature

The study team has identified 24 documents in total, of which a limited number provides a quantification of the impact of a simplification of consumer rights on innovation and growth. While the remaining studies do recognise the importance of consumer education in enhancing consumers' awareness of their rights and thereby helping them to exercise consumption choices more confidently, a causal relationship between simplified consumer rights and economic growth was hard to quantify.

A2.4 Data extraction form template

The completed data extraction form is provided to BIS in a separate Microsoft Excel spreadsheet.

Annex 3 Literature review sources

Key data gathered from the literature review includes bibliographical details of material forming the basis of the literature review synthesis. These are outlined in Table A3.1

A3.1 Resources/References gathered for literature review

Table A3.1 Bibliographical material

Issues Addressed	Resources/References
Key findings of the literature review	Productivity Commission, Australia: <i>Review of Australia’s Consumer Policy Framework</i> http://www.pc.gov.au/_data/assets/pdf_file/0006/79170/consumer1.pdf http://www.pc.gov.au/_data/assets/pdf_file/0008/79172/consumer2.pdf
	LBRO: <i>Regulation and Growth</i> http://www.bis.gov.uk/assets/brdo/docs/publications-2012/12-688-regulation-and-growth.pdf
	Office of Fair Trading (OFT): <i>Government in Markets: Why Competition Matters – A Guide for Policy Makers</i> http://www.oft.gov.uk/shared_of/business_leaflets/general/OFT1113.pdf
	BIS (2012) <i>Enhancing Consumer confidence by Clarifying Consumer Law: Consultation on the supply of goods, services and digital content</i> http://www.bis.gov.uk/assets/BISCore/consumer-issues/docs/E/12-937-enhancing-consumer-consultation-supply-of-goods-services-digital.pdf
	NAO (2011) <i>Protecting consumers – the system for enforcing consumer law</i> http://www.nao.org.uk/publications/1012/protecting_consumers.aspx
	BIS (2011) <i>Better Choices: Better Deals, Consumers Powering Growth</i> http://www.bis.gov.uk/feeds/~-/media/673F5899B57148D29E077E8B7ECF1D7F.ashx
	Cabinet Office <i>Behavioural Insights Team</i> http://www.cabinetoffice.gov.uk/behavioural-insights-team
	European Commission (Monti Report) (2010) <i>A New Strategy for the Single Market</i> http://ec.europa.eu/bepa/pdf/monti_report_final_10_05_2010_en.pdf
	European Commission (2012) <i>A new European Consumer Agenda – Boosting confidence and growth by putting consumers at the heart of the Single Market</i> http://europa.eu/rapid/press-release_IP-12-491_en.htm
	BIS (2011) <i>Consumer Landscape Review Impact Assessment</i> http://www.bis.gov.uk/assets/biscore/consumer-issues/docs/c/11-981-consumer-landscape-review-impact-assessment

Issues Addressed	Resources/References
Linking simplification and clarification of consumer rights and economic growth	BIS/ICF GHK (2012) <i>Empowered Consumers and Growth: Literature Review – Final Report</i> http://www.bis.gov.uk/assets/BISCore/consumer-issues/docs/E/12-977-empowered-consumers-and-growth-literature-review.pdf
	<u>Consumer rights → Awareness/Understanding → Empowerment</u> Scrutiny Unit <i>Economic Rationales for Regulating Markets</i> http://www.parliament.uk/documents/commons/Scrutiny/Rationale%20for%20regulating%20markets.pdf
	Amsterdam Center for Law & Economics (2006) <i>The Impact of Consumer Protection on Competition and Competition Law - The Case of Deregulated Markets</i> Howells G. Journal of Law and Society [Vol. 32, No. 3] (2005) <i>The Potential and Limits of Consumer Empowerment by Information</i> BIS (2012) <i>Enhancing Consumer Confidence by Clarifying Consumer Law</i> http://www.bis.gov.uk/assets/BISCore/consumer-issues/docs/E/12-937-enhancing-consumer-consultation-supply-of-goods-services-digital.pdf Williams T. (2007) <i>Empowerment of Whom and for What? Financial Literacy Education and the New Regulation of Consumer Financial Services</i> http://kar.kent.ac.uk/981/1/Empowerment_5NOV07DP.pdf
Linking simplification and clarification of consumer rights and economic growth	<u>Consumer rights → Awareness/Understanding → Consumer Behaviour/Participation in Markets</u> The Consumer Council (2008) <i>Well, what do consumers know now? A Consumer Council Progress Report on Consumer Proficiency 2003-2007</i>
	<u>Empowerment/Confidence → Innovation/ Economic growth</u> Commission Staff Working Paper (2011) <i>Consumer Empowerment in the EU</i> http://ec.europa.eu/consumers/consumer_empowerment/docs/swd_consumer_empowerment_eu_en.pdf OFT (2011) <i>Competition and growth</i> http://www.offt.gov.uk/shared_offt/economic_research/offt1390.pdf
	<u>Linking enforcement/redress and economic growth</u> OECD (2010) <i>Regulatory Policy and the Road to Sustainable Growth</i> http://www.oecd.org/regreform/policyconference/46270065.pdf
Linking simplification and clarification of consumer rights and economic growth	<u>Simplified Consumer Law → Competition → Innovation/Economic Growth</u> Consumer Focus (2010) <i>Unleashing the New Consumer Power</i> http://www.consumerfocus.org.uk/files/2010/10/Unleashing-the-new-consumer-power-WEB-version.pdf

Annex 4 Detailed description of the CMOD model

A4.1 What is CMOD⁴²?

CMOD is an Excel-based model developed by Australia’s Productivity Commission. This experimental model seeks to quantify the costs and benefits of Australia’s proposed consumer reform package – the *Australian Consumer Law*.

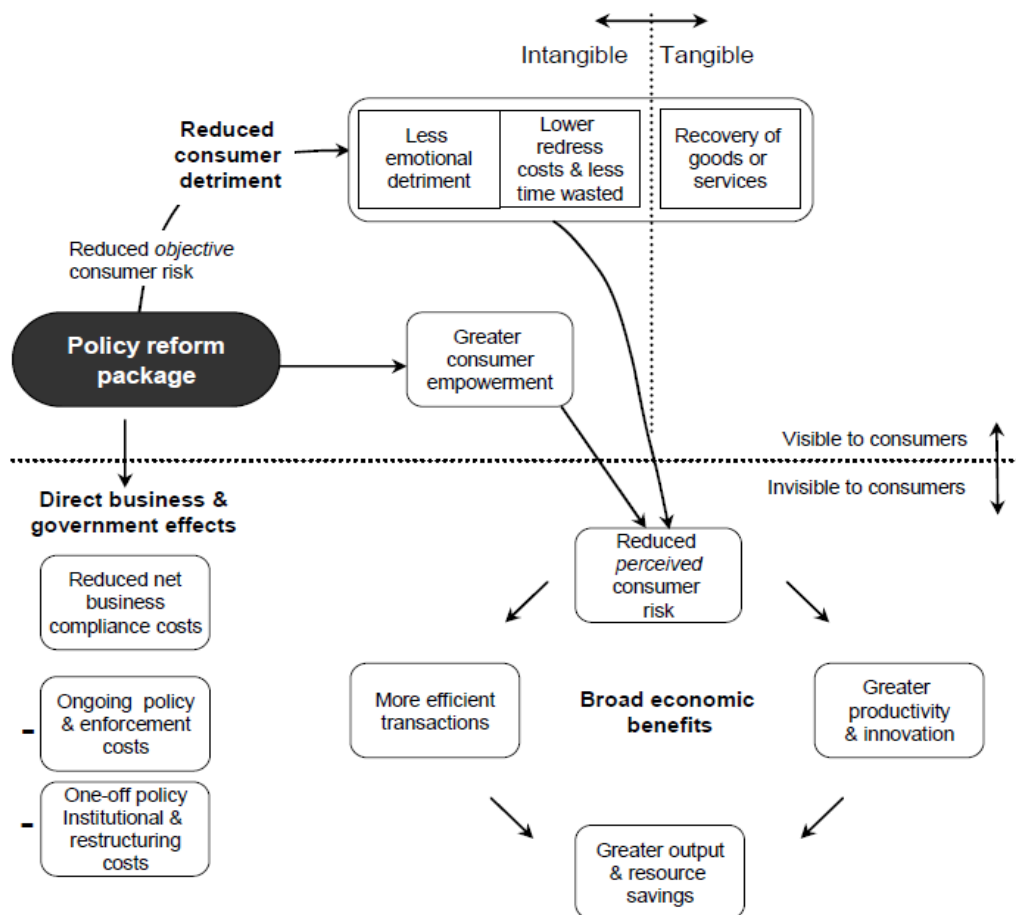
A4.2 What are the main relationships of causality identified and quantified by CMOD?

The CMOD model shows that there are three major routes via which the potential benefits of a simpler, unified consumer legislative framework can be conferred to the wider economy:

- (1) reduced consumer objective risk/consumer detriment;
- (2) greater consumer empowerment; and
- (3) direct business and government effects

Figure A4.1 illustrates the impacts of a reformed consumer policy.

Figure A4.1 Key likely impacts of the uniform *Australian Consumer Law*⁴³



⁴² A full description of this model is available on the Commission’s website: <http://www.pc.gov.au/projects/inquiry/consumer/models/cmmod>

⁴³ Source: *ibid*

A4.3 What are the major variables considered in the CMOD model?

Variables used in the model have been classified as either: (i) fixed or (ii) stochastic; the latter meaning that these variables have been randomly determined. The full list is outlined in table A4.1.

Table A4.2 Some of the fixed and stochastic variables used in CMOD simulation

Fixed Variables
<ul style="list-style-type: none"> ■ Number of consumers Victoria 16 years plus ■ Number of consumers Australia 16 years plus ■ Value of household consumer transactions (expressed in Australia \$m 2005-06 prices) ■ Long run average 1992-93 to 2006-07 household consumption to GDP ratio (expressed as a ratio) ■ Long run average 1992-93 to 2006-07 public & private consumption to GDP ratio (expressed as a ratio) ■ Number of Australia-wide estimated consumer policy court actions by regulators (as at 2005-06) ■ Share of equity owned by foreigners of those firms that are the subject of new consumer laws (expressed as a %) ■ Success rate of new actions by regulators (expressed as a %) ■ Welfare weight factor ■ Low employment range for businesses facing compliance savings (single proprietor businesses) ■ Maximum employment at which compliance savings per employee are constant ■ Parameter for function determining shape of compliance savings across firm size (2 parameters have been included) ■ GDP 2006-07 (expressed in 2006-07 prices) ■ Years over which gains are realised ■ Shift factor (to displace the second parameter describing compliance costs by size) ■ Compliance cost-saving per employee for largest enterprise ■ Maximum cost-saving per employee achieved
Stochastic Variables

- Discount rate
- Marginal excess burden (expressed in %)
- Relevant transaction costs as a share of total household consumption - the 'due diligence' costs of consumers (expressed in %)
- Consumer detriment for Victoria (in \$m) [replacement costs/repair]
- Consumer detriment for Victoria (follow-up and time costs; not emotional, in \$m)
- A bias adjustment term (one that will for certain disregarded factors such as: under-reporting of events covered and unreported unrevealed detriment as well as events that do not reflect misconduct or events from previous years)
- A risk adjustment term (one that will adjust risk due to consumers having the tendency to inflate the risk of problems above the actual risk)
- Fairness and emotional 'premium' as a % of the experienced detriment to the consumer
- Improved deterrent effect on incidence
- Transaction cost elasticity
- Annual average additional compliance costs (nearly all will have zero) of non-employing businesses
- Annual average additional compliance costs (most will have zero) of businesses<100
- Annual average additional compliance costs (many will have zero) of businesses>100
- Average setup costs per firm (non-employing) associated with unfair contracts (in \$)
- Average setup costs per firm (small firms) associated with unfair contracts (in \$)
- Average setup costs per firm (big firms) associated with unfair contracts (in \$)
- Litigation % increase
- Average fine/costs per guilty firm
- False positive rate (i.e. share of actions where penalty is applied where it should not)
- Days per case
- Cost per day of regulator/business in any contested case
- Regulators' preparation costs per case
- Business margin (expressed in %)
- Staff increment associated with general policy development and administration
- Cost per staff member of new policy staff
- Person years per jurisdiction and negotiating new template arrangements and industry specific arrangements
- Cost per staff member (average) for negotiating new template arrangements and industry specific arrangements, including overheads
- Cost per staff member including overheads of one-off legal & policy costs (expressed in \$)
- Base total factor productivity (TFP) - productivity growth at the initial level of consumer risk
- Lowest TFP growth rate
- The maximum steady state TFP growth rate (associated with zero consumer risk)

A4.4 What are the key CMOD estimates to be retained?

The experimental assessment carried out via CMOD provided the following estimates of key economic impacts:

Figure A4.2 Simple summary table

	Non-PV	PV are to Dec 2008	
	Annual saving in 2008-09	Present value	Annuity value
	\$m 2006-07 prices	\$m 2006-07 prices	\$m 2006-07 prices
Net avoided direct detriment for consumers	\$726	\$20,514	\$1,231
Reduction in risk-based transaction efficiencies	\$324	\$9,166	\$550
Gains from increased innovation	\$18	\$14,033	\$842
Net gains from reduced business compliance costs	\$38	\$1,628	\$98
All legal and administrative costs	\$24	\$399	\$24
Net gain	\$1,083	\$44,943	\$2,697

Annex 5 Detailed equations for the estimation of CMOD impacts

A5.1 Valuing consumer detriment

Equation 1:

consumer detriment = existing consumer detriment (£) x (1-%innocent detriment) x (1+%emotional costs)

Recommendations

Existing detriment should be measured using the Office of Fair Trading's (OFT's) 'Consumer Detriment' survey (2008) which provides an estimated overall value of consumer detriment in the UK in 2008 of around £6.6 billion. Inflated to 2012 figures, this equates to £7.5 billion.

In the absence of firm evidence to assess the degree of 'innocent detriment', it is recommended that this be ignored for the purposes of measuring the impacts of a UK Consumer Bill of Rights. If however applied an adjustment of less than 10 per cent should be used.

Emotional costs in the UK baseline should increase the estimate of consumer detriment by 25-30 per cent, consistent with the Australian approach

Equation 2:

% consumer detriment = consumer detriment/household consumption before reforms

Recommendation

Latest household consumption data should be sought from the latest Office for National Statistics data

Equation 3:

%consumer detriment before reforms = % consumer detriment*1.1

Recommendation

The Australian assumption of a 10% increase for consumer risk adversity seems appropriate in this context in the absence of other information (see main report)

Equation 4:

Gain from reduced consumer risk = % detriment reduction*%consumer detriment before reforms*household consumption after reforms

Recommendation

An assumed 5 per cent reduction in consumer detriment following the reforms is appropriate and was derived from UK evidence for the Australian study.

A5.2 Reductions in transaction costs

Equation 5:

Transaction costs before reforms = 1%*consumption before reforms

Recommendation

Transaction costs equivalent to 1 per cent of consumption is a good approximation for the UK, in the absence of better information

Equation 6:

Transaction costs after reforms= (constant + cost elasticity*% consumer risk after reforms)*consumption after reforms

Recommendation

Elasticity of 1 should be applied to the UK market and a 5% reduction in consumer detriment applied from above.

It is assumed that a 1 per cent increase in consumer risk increases these transaction costs by 1 per cent. In other words, the cost elasticity is 1. Despite the lack of evidence the Commission felt that an elasticity value of 1 is a moderate and safe assumption as it implies unit cost elasticity. This means that for a given percentage change in consumer risk will lead to the same proportionate change in transaction costs. Indeed, it would seem reasonable to expect that transaction costs increase proportionately to increases in consumer risk. The study team therefore recommends that an elasticity of 1 is applied to the UK market

Equation 7:

change in transaction costs = transaction costs before reforms - transaction costs after reforms

A5.3 Productivity impacts.

Taking into account the fact that most consumers are risk averse, the study team expects consumers to remain with established and trusted businesses as the risk of detriment rises. Such consumer behaviour reduces competition by putting less pressure on existing merchants to compete and at the same time reducing the opportunities for new businesses to enter the market. Because merchants are not competing, the innovation effect in the market decreases which in turn weakens productivity growth. In other words, higher consumer risk has a significant effect on consumer behaviour to the extent that it can limit innovation and undermine productivity growth.

The rationale is therefore that greater transparency and consumer awareness (that will originate from a simplified consumer regulatory framework) decrease perceptions of risk and thus enable consumers to better act as a competitive constraint on suppliers, providing them with strong incentives to reduce costs, improve their goods and/or services and develop other innovative products. In essence, it is a culture of greater consumer responsibility that encourages the efficient operation of markets as, through their choices, consumers make a substantial contribution to improvements in business productivity. The need to respond continuously to consumer preferences motivates businesses to search for productivity gains and efficiency enhancements in order to maintain market share.

The function of productivity growth is expressed as an inverse relationship between the productivity rate and consumer risk. This is because as consumer detriment decreases, productivity is likely to increase

Equation 8

productivity=A + B x riskC

This function is constrained at the highest and lowest risk levels and curves inwards.

The reason behind choosing this type of function is that the effects of lower (or higher) risk levels have a sustained effect on productivity growth. Further, markets are affected by consumer behaviour which in turn depends on consumer protection laws.

In order to estimate A, B, and C in the equation above, the Commission considers scenarios before reforms where productivity is at a maximum and minimum levels assuming low and high risk of detriment respectively. The Commission uses the base level productivity growth rate (i.e. productivity at the 'baseline' level of consumer risk or, in other words, the productivity level when the economy is in a steady state) to estimate the maximum and

minimum productivity levels. This base rate is set at 1.75 per cent per year. This base rate was used by the Productivity Commission in their earlier work on population ageing in Australia and by the Australian Treasury in its Intergenerational Report published in 2007.⁴⁴ These reports assume that the base productivity rate is equal to the average annual rate of growth of labour productivity over past 30 years (where labour productivity is measured as output per hours worked).

Once A, B and C are estimated using pre-reform values, post-reform productivity growth rate is calculated taking the risk after reforms already estimated above.

Equation 9:

productivity after= A + B x risk afterC

Following this approach, the Commission estimates that a reduction in predicted detriment (estimated previously) increases productivity by 0.13 per cent per year on continuous basis.

The results show an increase of 0.13 per cent in the productivity rate induced by the policy changes.

A comparable source of data for UK productivity growth is provided by the Office of National Statistics (ONS). ONS publishes data on output per worker for the whole of the UK on a quarterly basis from 1960 to the second quarter of 2012. This dataset can be used to calculate a long-term average of annual labour productivity growth rates in the UK over the past 50 years. However, first the quarterly figures of labour productivity must firstly have to be converted to annual labour productivity growth. In the meantime, the study team used ONS's calculations of the percentage change of labour productivity per annum which are provided only for the period 1998-2011. The study team obtained an estimate of a UK base rate productivity growth rate of 1.45 per cent. This estimate is smaller than the Commission's figure for the Australian economy but it seems appropriate in the UK context given the impact of the recession on UK economy in 2008 and 2009.

The impact on productivity is then calculated as followings.

Equation 10:

% change in GDP per capita= (%growth in labour input per capita + 1) x (%change in productivity+1) – 1

where the percentage change in labour input per capita is calculated using the Productivity Commission's Modified Demographic and Economic Model (MoDEM).

The new GDP is then estimated as follows.

Equation 11:

GDP after reforms=GDP before reforms x (% change in GDP per capita + 1) x (%growth in population+1)

where the percentage growth in population is also calculated in MoDEM. Data on population and labour inputs can be obtained from MoDEM, or the Office of National Statistics for the UK.

⁴⁴ Treasury of the Commonwealth of Australia, 'Intergenerational Report', 2007. Productivity Commission, 'Economic Implications of an Ageing in Australia', 2005.