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Report on a Roundtable on Demand-side Economics for Consumer Policy

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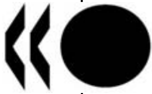

Organisation de Coopération et de Développement Economiques
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DIRECTORATE FOR SCIENCE, TECHNOLOGY AND INDUSTRY
COMMITTEE ON CONSUMER POLICY

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ROUNDTABLE ON DEMAND-SIDE ECONOMICS FOR CONSUMER POLICY: SUMMARY REPORT

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English - Or. English

FOREWORD

This report was prepared by Ian McAuley, a consultant to the OECD, with comments from member countries and under the supervision of the Secretariat.

The report was declassified by the Committee on Consumer Policy (CCP) at its 71st Session on 29-30 March 2006.

It is published on the responsibility of the Secretary-General of the OECD.

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MAIN POINTS

In October 2005, the OECD Committee on Consumer Policy brought together a number of academics and public officials from member countries in a one day Roundtable to outline and discuss developments in economic research, particularly behavioural economics, with a view to exploring possible implications for public policy. The session was exploratory; views expressed were not necessarily representative of those of member governments and there was no intention to bind the Committee to any specific policies.

The Roundtable focused primarily on the insights of behavioural economics. Further work could be carried out by the CCP to examine the contributions of other branches of economics to the consumer protection responsibilities of member countries. In particular, the CCP could explore how the insights of these different branches can be combined to provide further analysis and rigour for determining and implementing important policy decisions relating to the protection and empowerment of consumers in markets.

The following main points emerged from the various presentations and discussions held during the Roundtable.

- **The demand-side, particularly consumer behaviour, is an important indicator of market efficiency**

  For markets to operate efficiently, it has long been recognised that a competitive supply side structure is necessary. Attention also needs to be paid to the demand side, for efficient market outcomes result from the interaction of suppliers and consumers.

- **Conventional economics regards market failures as the result of deficiencies in the amount or quality of consumers' information**

  The discipline of mainstream or conventional economics assumes that well-informed consumers rationally calculate their best options in market transactions. Mainstream or conventional economics, however, recognises that failures can occur in structurally efficient markets to the detriment of consumers. Apart from consumer detriment resulting from suppliers' conduct, examples include the absence of meaningful price information, a lack of information on the quality of goods and services on offer, and difficulties in making comparisons between competing products. Public policy has generally been concerned with these failures which result from a lack of consumer information, or misleading information. Hence, legislation has been adopted to prohibit false or deliberately misleading claims, and to regulate specific information related problems, requiring, for example, disclosure of information, provision of warranties, and cooling off periods.

- **Behavioural economics suggests other reasons for these failures**

  Over the last 30 years, more has been learned about actual consumer behaviour. Studies in the field of behavioural economics using laboratory experiments and studies in markets have shown

that consumers exhibit systematic departures from what economics would classify as "rational" behaviour.

Behavioural economics finds market failures resulting not only from information failure, but also from consistent biases in consumer behaviour. For example, even when presented with full information consumers may not be in a position to understand and/or use that information to their advantage. Therefore, different policy or regulatory intervention may be necessary to help consumers adopt decisions in their best interest.

- **Behavioural economics may offer new insights for public policy**

  Behavioural economics may offer new insights for alternative or revised mechanisms of market intervention to ensure markets operate efficiently. In some member countries, there are already some interventions based on behavioural economics – such as those which align with consumers' tendency to accept "default" options. However, although there has been significant research in some areas (for example in certain financial markets), a more specific evidence base still needs to be identified before there is a more widespread policy approach.

- **The Committee is working further on policy development**

  In this context, the Committee on Consumer Policy seeks to begin the development of a more rigorous approach to analysing the demand-side of markets. This initiative is in conjunction with a number of other prominent research projects currently taking place in the area of demand-side economics and consumer detriment. The aim is that it will assist in determining whether and when intervention is necessary, the most effective shape of intervention, and the costs and benefits of mechanisms to deliver consumer empowerment and consumer protection. The Roundtable represented an important first step in this direction.

INTRODUCTION

The OECD's Committee on Consumer Policy (CCP) recognises that consumers play an important role in encouraging the efficient operation of markets. Through their choices consumers encourage businesses to compete and innovate. To attract customers businesses reduce prices and improve the quality and quantity of goods and services.

Through their behaviour in markets, 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 that will allow them to maintain market share. Increases in productivity, in turn, generate economic growth, employment opportunities and higher real household incomes. Policy makers, however, have tended to focus on the structure of markets rather than on the ways in which consumers' behaviour shapes market outcomes. They have gathered little empirical evidence of consumer behaviour in markets. (Corporations, through their marketing research, have a much better-developed research base than policy makers).

In order to begin building up this evidence base, on 24 October 2005, the CCP hosted Roundtable discussions on "Demand-Side Economics for Consumer Policy,"[1] which drew on the insights of conventional and behavioural economics. The Committee explored the extent to which economists' studies of the demand side of markets might be able to contribute further to consumer policy.

Conventional economics starts with the assumption of rational behaviour (in aggregate) and explores, among other things, the impact of information problems on consumers. More specifically, the impact on consumers of transaction costs, such as search and switching costs, and information asymmetries, are interesting questions. On the other hand, behavioural economics[2] goes beyond the standard assumption of aggregate rational consumer behaviour. This discipline shows that there are biases in consumer behaviour which are material in explaining how consumers handle market decisions. The biases identified by behavioural economists include misunderstanding small probabilities, pseudo-certainty, hyperbolic discounting, overconfidence, default bias, decision-conflict (overwhelming choice), and so on. Behaviour revealed in experiments and other research into consumer behaviour give rise to some interesting questions such as whether the results translate into market effects, especially of the kind that affect public policy decisions.

The Roundtable brought together nine speakers from various backgrounds, including academics and public officials from member countries, to make presentations to the Committee.[3] The first four presentations covered general economic theories and findings; the other five presentations were mainly case studies. Each block of presentations was followed by a short discussion session.

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1 The agenda of the Roundtable is in Appendix I.

2 Behavioural economics has risen in prominence since Daniel Kahneman received the Nobel Prize in economics in 2002.

3 Note that the views which were expressed by public officials do not necessarily reflect those of their agencies or of the governments of their countries.

This report provides a consolidated summary of the discussions at the Roundtable. It was prepared by Ian McAuley, consultant to OECD, with input from OECD member countries and the Secretariat.

Section 1 of this report provides an overview of the subject matter of the Roundtable. It is not intended to represent a true summary of all opinions expressed during the Roundtable discussion. Rather, it builds on the speakers' written papers, informal preliminary discussions among the presenters and invited guests which were held before the Committee session, as well as the Committee Roundtable itself. Section 2 includes a summary of each of the speakers' presentations. Written papers from three speakers in the first session are to be found in Appendix III.

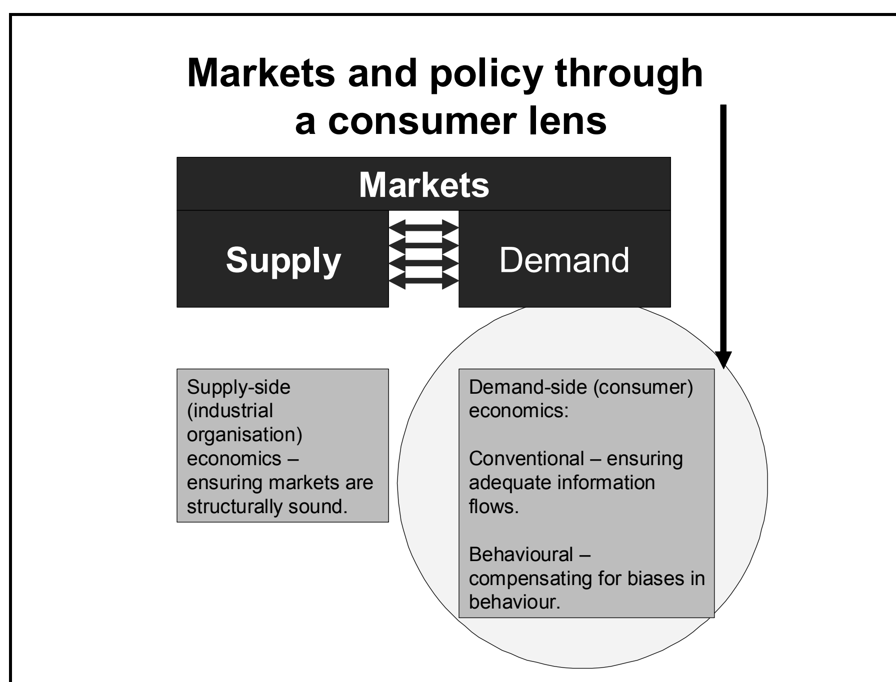
1. OVERVIEW – THE SUPPLY AND DEMAND ASPECTS OF MARKETS

Competition involves the interaction of supply and demand. Competition policy is concerned mainly with the supply-side structure of markets, ensuring that there are no unnecessary barriers to entry, that market concentration does not lead to economic loss or unreasonable transfers from consumers to producers, and that there are effective legal sanctions against fraud, misleading conduct, and collusion among suppliers. Various policy instruments in member countries are used to achieve structural soundness in markets.

Even when markets are structurally sound on the supply side, however, there can still be adverse consequences for consumers and therefore a misallocation of resources. Problems in gaining access to information and certain patterns of consumer behaviour can result in some potentially beneficial transactions not occurring ("deadweight loss"), an excessive burden of transaction costs (the costs of searching for and switching to alternative suppliers), and some stickiness in prices, all to the detriment of consumers. In short, the potential benefits of competition are not fully realised.

It is the behaviour of consumers that activates competition, and that behaviour can be shaped in part by public policy. Public policy, therefore, is concerned with the demand side as well as the supply side of markets, to ensure as a basic condition that consumers are well-informed. Provision of information however, while being necessary to activate competition, may not be in itself sufficient. Even well-informed consumers exhibit consistent patterns of behaviour that can lead them away from making decisions that satisfy their preferences. The Committee examined the core question of the extent to which these distortions should be addressed by public policy.

Figure 1: Market Analysis through a Consumer Lens



Speakers at the Roundtable were concerned with these demand-side issues and the implications for public policy. In these short sessions it would have been inappropriate for specific policy interventions to have been proposed. Indeed, as is to be expected in such a forum, there was less than complete consensus on the extent of consumer detriment in structurally sound markets and therefore on the need for any policy interventions which may be designed to address that detriment.

Consumer rationality

The mainstream branch of economics, which can be referred to as "conventional economics", is based on the notion of "rational" behaviour on the part of suppliers and consumers. For the purpose of modelling market outcomes, all decision makers in markets are assumed to pursue their self-interests rationally. They approach markets with their needs and preferences already determined, they undertake a comprehensive search of all alternatives, they weigh up the costs and benefits of those alternatives, and they make decisions which maximise their welfare.[4] As a refinement on this model, it is acknowledged that decisionmakers do not undertake comprehensive research; the theory of "bounded rationality" suggests decision makers truncate their search at the point when the costs of searching start to outweigh the benefits resulting from that search, and that they seek ways to make the search process more efficient. Even if individual firms and people depart from such behaviour, rationality provides reasonably robust predictive power to describe aggregate market outcomes. This is not to suggest rational actors in markets will bring about efficient resource allocation and maximum consumer welfare; other conditions have to be met, the most important of which is that markets are structurally competitive, or "sound".

Structural soundness – necessary but not sufficient

In general, speakers assumed that structural factors on the supply side have been attended to – that the markets they were discussing were structurally sound in terms of openness to entry of competitors, the absence of collusion, the absence of fraudulent conduct etc. This is the realm of competition policy instruments such as regulations on mergers and acquisitions, antitrust laws, prevention of collusion, and prohibitions of deceptive conduct. Such instruments are generally well-established in member countries, and, because they relate to corporate behaviour, they tend to be consistent with the economists' notions of "rational" behaviour – the notion that corporate behaviour is driven by clear motivations of profit, or, in some cases other objectives such as growth or market share.[5]

Even when there is structural soundness on the supply side, however, consumer detriment can result. Policies to ensure a competitive supply side are necessary, but not sufficient, to ensure there is no consumer detriment.

Consumer detriment and its costs on individuals

Consumer detriment can take several forms. Sometimes, it can result from poorly designed regulations which fail to take proper account of consumers' interests, or which are not assessed for ongoing relevance. Consumer detriment can also result from deliberate misconduct on the part of some traders or other consumers. Speakers generally acknowledged these issues, but they were more focused on the economies of information and consumer behaviour.

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4 This construction is from Friedman, M (1957), *A theory of the consumption function*, Princeton University Press, New Jersey, as a model of aggregated behaviour. "Bounded rationality" is a general phenomenon in decision making, originally articulated by Herbert Simon in *Models of Man,* Wiley, New York (1957).

5 Some "rational" corporate behaviour can lead to outcomes which decision makers would not consider to be rational. This is the case of the prisoners' dilemma situation, in which each actor behaves rationally, but the aggregate outcome is sub-optimal from all actors' perspectives.

Consumer detriment can also be associated with suppliers' loss; in some cases, transactions which could be beneficial to both consumers and suppliers do not take place at all. For various reasons, consumers walk away from the marketplace, or find, because of problems in communication between suppliers and consumers, they have to settle for second-best goods or services.

Such is the well-known problem of "lemons"; when suppliers cannot convince consumers of the quality of their products, high quality products become crowded out of markets by the presence of lower-priced, lower-quality products. The example that comes most readily to mind is the case of used cars; poor quality used cars drive out the market for good quality used cars. There are many other markets with such characteristics; they are to be seen generally in the case of "credence" goods. These are goods subject to infrequent purchases and for which consumers have difficulty judging quality before purchase and even after purchase in some cases. Examples include financial services such as insurance, savings products, and house repairs.

In these cases of asymmetric information the actual possibility that suppliers may mislead potential consumers is detrimental not only to the consumer seeking to buy a high quality product, but also to the supplier seeking to sell a high quality product. In economists' terms such detriment is a form of "deadweight" loss. When the supplier has to discount heavily to overcome the consumer's scepticism the benefits accrue to the consumer, but when no transaction takes place both the consumer and supplier can be disadvantaged; the losses to the consumer or supplier accrue to neither party.

In some other cases information is available to consumers, but the costs of obtaining and processing information are greater than the perceived benefits to be obtained by continuing to search or by switching to another supplier. This is the situation of "bounded rationality",[6] the rational decision-maker weighs up the sum of search and switching costs against the expected benefits of continuing to search for a lower-priced or more satisfactory product. In some markets the stickiness caused by even small search costs can lead to an upward bias in market prices, to the extent that monopoly prices tend to prevail in some markets.[7]

There are many situations in which consumers under-estimate the potential benefits from searching and switching. Brand loyalty provides a case in point, and it may take a very high price discount for a competitor to dislodge consumers loyal to one particular supplier. (The original consumer decision may have been rational, but over time the supplier with a low-price reputation may exploit that reputation to sustain customer loyalty.) Speakers presented evidence from energy suppliers which showed a high degree of consumer inertia, generally to their detriment. Even when comparative information is available to consumers this inertia may be explained by computational difficulties, perceptions that search costs are high, or by trust (possibly misplaced) in people's present supplier.

In consumer transactions, information tends to serve its market-perfecting function most smoothly in transactions of goods with frequent repeat purchases, of low price, and for which the consequences of an

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6 Simon, H. *op. cit.* footnote 4.

7 This phenomenon is known as the "Diamond paradox". Even when there are several firms in a market, each firm can raise its prices compared to those of its competitors up to the level of search costs; once all firms have done so the process of price increases can start again, until the monopoly price prevails. Diamond, P. A. (1971), "A Model of Price Adjustment", *Journal of Economic Theory*, pp. 158-68. While some suggest that this is an intellectual curiosity with little empirical support, there is some evidence of its operation. Empirical research to support the Diamond theory was presented by Professor Joshua Gans, of the University of Melbourne, to the Australia Competition and Consumer Commission (ACCC) Regulatory Conference in July 2005. *See* Gans, "The Road to Confusopoly," available on the ACCC conference Website at http://www.accc.gov.au/content/index.phtml/itemId/658141/fromItemId/3765.

unwise purchase are minor. Simple items of clothing, and toys (provided they are safe) fit easily into this category of goods. For such goods the economists' assumptions of "rational" behaviour provide reasonably robust predictive power.

The consequences of inadequate information are most severe for goods of high value and infrequent purchase, such as health products claiming protection against various diseases. Sometimes, as in the case of retirement savings products there is a very long lag between purchase and the consumer's experience of performance.

Another prominent area in which consumers have consistently experienced substantial difficulty is where products are undergoing rapid changes in technology, or where new technology-based products are coming on to the consumer market. Examples include high-end personal computers, digital cameras and print accessories, and solar electricity systems. In such cases, because of the novelty of the products and the speed of innovation, it is very difficult for consumers to optimise their search behaviour. There is a strong incentive for suppliers to mislead consumers.

Utilities, such as electricity, gas, water and telecommunications stand out as a category of goods for which the full benefits of competition have not necessarily been achieved. In recent years many member countries have brought competition into utility provision, particularly into those areas which are not necessarily natural monopolies (fixed infrastructure such as wires and pipes constituting natural monopolies). Consumers are presented with a choice of retail suppliers, in the case of water, gas and electricity all having to supply the same product, with very little possibility of competing through product differentiation. (Firms may have some limited scope for differentiation in terms of peripheral services such as fault repair.) That means that competition is necessarily centred on pricing, or services related to pricing, such as the billing frequency or bundling of other products.

In theory, because in utilities the product characteristics are fixed, the search function should be reasonably simple, being confined to pricing aspects. In reality, however, there is stickiness in these markets – speakers presented empirical evidence from utility markets showing many consumers are not taking advantage of beneficial switching and, in some cases, are switching to higher-cost suppliers. The problem lies in what one speaker called "confusopoly", relating to the difficulties consumers have in comparing the different bundles of offers from utility firms – with different bases for charging fixed and volume-related fees and offering different bundles of related products. Manufactured confusion is a deliberate tactic some firms use to avoid price competition; evidence was presented of strong industry resistance to measures which would make price comparison easier for consumers. These problems are most acute for telecommunications, where there are many different products (long-distance, local, mobile, fixed, etc.) offered by the same supplier. In a case study in one member country, it was revealed that 90% of mobile phone customers were on a more expensive plan than the most appropriate one for their needs available from the same company.

Manufactured confusion can occur even in industries where pricing can be simple *e.g.* gas, electricity. Even in the case of mobile telephony some firms make their pricing complicated on purpose. This has nothing to do with the technological complexity of mobile telephony.

While these issues of information failure are covered within the bounds of conventional economics and its assumption of "rational" consumer behaviour, there is a strong and growing body of evidence of systematic departure from any model of rational behaviour; consumers are subject to certain consistent

biases in decision making that lead them to make decisions which are not in their best interests.[8] These are covered below in the discussion on "behavioural economics".

The macro costs of consumer detriment

From one perspective, consumer detriment can be seen as a social justice or fairness issue. Reflecting this social justice concern the Committee on Consumer Policy states that it "ensures the highest standards of consumer protection and promotes a fair global marketplace for consumers." From a social justice perspective market outcomes can be seen in terms of tradeoffs between "consumer" and "producer" interests, and consumer policy can be seen simply in terms of "consumer protection". Behaviour such as fraud and misleading conduct can be seen narrowly simply in terms of consumer detriment.

But poorly functioning markets, while imposing costs on consumers, may also impose costs on businesses and throughout the economy. Deadweight losses – the losses which occur when trade is inhibited – are losses borne by both consumers and producers. High transaction costs are one cause of deadweight loss. While transaction costs are an inevitable part of market exchanges, there are instances where the costs of government intervention are more than outweighed by the benefits of reducing transaction costs. Regulations against fraudulent and deceptive advertising can be particularly effective in this regard, while the costs of inaction can be significant. Transfers from consumers to producers involve no immediate resource re-allocation but, if sustained they can encourage investment in certain activities with opportunities for such transfers at the expense of other activities. If fraud and misleading conduct are not addressed, there will be no incentive for suppliers of quality products or of genuinely innovative products, and consumers will become generally mistrustful of markets. If price stickiness results in long-term sustained excess profits, the incentives for innovation and productivity improvement are dulled. In short, economic progress is impeded. And politically, if public policy is not seen to be delivering benefits for consumers, there will be political pressure for paternalistic and protective policies which shy away from competition.

Behavioural economics

As indicated above, for the purpose of this Roundtable speakers characterised "conventional economics" as the body of economic theory which rests on assumptions of "rational" consumer behaviour; if consumers are well-informed, they will, in aggregate, act in ways which fulfil their preferences.[9] One speaker summed up the position with a quote from a basic economics text:[10]

> "We consumers are not expected to be wizards. We may make most of our decisions unconsciously or just out of habit. What is assumed is that consumers are fairly *consistent* in their tastes and actions – that they do not flail around in unpredictable ways, making themselves miserable by persistent errors of judgment or arithmetic. If enough people act consistently, avoiding erratic changes in buying behaviour, our scientific theory will provide a tolerable approximation to the facts".

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8 For a brief summary of evidence of departure from "rational" behaviour, see Thaler, R, "Toward a Positive Theory of Consumer Choice" in Kahneman, D. and Tversky, R. (eds) (2000), *Choices, Values and Frames,* Russell Sage Foundation.

9 The papers enter the discussion on terminology. To describe one stream as "conventional" may imply that behavioural economics is novel, or on the fringe of the discipline. This was not the intention of the speakers.

10 Samuelson, P. A., Nordhaus, W. D. (1992), *Economics,* McGraw-Hill.

This is what economists call the *homus economicus* model – consumers who individually may not always be rationally calculating, *en masse* and in general can be modelled as if they behave rationally. Preferences are determined on the basis of maximised self-interest. And preferences in the short-term are stable; consumers approach markets with given preferences.[11]

The empirical discipline of behavioural economics extends the knowledge base of economics with insights from empirical studies of consumer behaviour. Relying largely on psychological studies, in laboratory simulations and actual markets, behavioural economics delves into the ways in which people make decisions. These patterns of behaviour, or biases, indicate ways in which consumers make decisions that are inconsistent with their welfare. This extension of knowledge can provide an important contribution to policy, both by identifying market failures missed by traditional theory and by contributing to the effectiveness and efficiency of remedies. Four such biases tended to dominate the discussions at the Roundtable – the *endowment effect*, *time variant preferences*, *framing effects* and *choice overload*. These are mentioned below, but there are many others – a more complete list of biases together with short descriptions is at Appendix II.

In general, these biases arise from the application of decision-making heuristics. These are simple rules of thumb, which are functional means of simplifying decision making, and which, most of the time, lead to optimum or at least satisfactory outcomes. In certain situations, however, they can have adverse consequences in terms of consumer welfare.

Evidence suggests that while some consumers are aware of these biases and have the discipline to overcome them when necessary, in general, their manifestations are not highly related to factors such as education and income.[12] They tend to arise in certain situations, or types of transactions, rather than among certain classifications of consumers. That is, anyone can be subject to these biases in certain situations.

The findings of behavioural economics can be distinguished from the theories of conventional economics in that the latter ascribes market failure (in structurally sound markets) to information deficiencies – problems in either obtaining or processing information. Behavioural economics finds that even well-informed consumers do not use that information in ways predicted by the conventional models that would maximise their benefits.

Some findings are based on laboratory studies in simulated markets (or, more specifically, "experimental economics") because they take place in contrived or simulated markets. Some speakers questioned the validity of behavioural economics (or a "snap shot") because it examines behaviour, in laboratory studies and actual markets, only at one particular time rather than over an extended period. Others, however, pointed out the application of these biases in real, rather than simulated markets, particularly in relation to financial products and utilities.

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11 The model is based on three assumptions about consumer preferences – that they are "complete, reflexive and transitive". Once this set of preferences are given, for any price a unique outcome in terms of demand is determined.

12 Behavioural economics distinguishes between consumers who know and do not know their biases; evidence is provided by the proliferation of self-binding mechanisms. For an early work see Schelling, T. (1984), "The Intimate Contest for Self-Command" in Schelling, T., *Choice and Consequence: Perspectives of an errant economics* (Harvard University Press). For later, empirical work, see DellaVigna, S. and Malmendier, U. (2004), "Contract Design and Self-Control: Theory and evidence" *Quarterly Journal of Economics* Vol CXIX Issue 2. For evidence of weakness of the relationship to education and income see, for example, Belsky, G. and Gilovich, T. (1999), *Why Smart People Make Big Money Mistakes and How to Correct Them,* Simon & Schuster. For evidence from a controlled field study see Bertrand, M., Karlan, D. Mullainathan, S., Shafir, E., and Zinman, A. (2005), *What's Psychology Worth? A field experiment in the consumer credit market*, Economic Growth Center, Yale University, Discussion Paper 918.

Some patterns of behaviour which are traditionally described in terms of search costs can be explained, more plausibly, by the findings of behavioural economics. For example, consumer adherence to a particular supplier may be explained in terms of information failure, but it can also be explained by the observed behavioural phenomenon of the "endowment effect" (also known as the "status quo" effect) – that is an established bias towards the supplier already being used. Even when an alternative supplier is clearly available at a lower price, and switching costs are low, consumers tend to stay with the supplier they have. (Consumer loyalty to a particular supplier can sometimes be functional even if there are certain situations in which switching would be advantageous. Trust between suppliers and consumers brings many benefits – for the parties concerned transaction costs are lowered, and, more broadly, there are external benefits for other consumers and suppliers as the social capital of market trust is developed. The endowment effect, however, is separate; it is observed even in cases of where there is no history of an established relationship with a given supplier. Experiments of the endowment effect suggest that people's attachments can be to the goods or services themselves.)

Conversely, but not completely offsetting the endowment effect, is a demand for novelty in its own right. One speaker, in suggesting that conventional models are too neatly deterministic in their predictions, suggested that consumers can be "obstinate or capricious", and can easily flip from one state to the other in their behaviour; preferences are anything but stable. Conventional economics suggests consumers approach markets with already-determined preferences; preferences are exogenous to the market model used in economics. The findings of behavioural economics suggest that preferences are constructed in market transactions; they are shaped in part by the transactions themselves and should be considered as endogenous to markets. The consumer does not necessarily approach the market with a firm shopping list.

Consumer behaviour can be influenced by the environment within which market transactions take place. One speaker referred to the psychological stress people experience in dealing with financial institutions when they are required to provide information about their personal lives. Apprehension of such stress can lead to market transactions not taking place.

The other main bias discussed was the observed phenomenon of "time variant preferences". Rational economic behaviour would see consumers apply a single discount rate (rate of time preference) to decisions affecting future costs and benefits. If a consumer would invest USD 100 today in exchange for USD 110 in a year's time (a typical investment choice), one would rationally expect that same consumer to be indifferent to a return of USD 121 in two years, revealing a consistent personal discount rate of 10% a year. In fact, such behaviour is not generally observed. Sometimes consumers willingly incur high short-term costs in exchange for lesser benefits in the future (revealing a negative discount rate). Most commonly, however, there is evidence of "hyperbolic discounting": an individuals' discount rate tends to rise very steeply the shorter the time period being considered. For example, many people run up expensive short-term credit card debt, while holding low-yielding investments in financial instruments.[13] In everyday language this phenomenon is revealed in behaviour which can be described as myopia, a lack of self-control, and procrastination. People may have rationally sound intentions relating to tradeoffs between the present and future, but fail to act on these intentions.

If consumers lack self-control, but wish to compensate for this deficiency, firms can offer products which help consumers to make commitments. The example used in many articles and texts relates to gymnasium membership, where the consumer makes a large upfront payment in exchange for free use of the gymnasium; the sunk cost combined with the free access encourages the consumer to use the

13 For a simple and clear explanation of hyperbolic discounting, see Laibson, D. (2001), "Purse Strings of the Heart", *Harvard Magazine,* September-October 2001. David Laibson has a more comprehensive description in Laibson, D. (1997), "Golden Eggs and Hyperbolic Discounting", *Quarterly Journal of Economics,* Vol 112, No 2.

gymnasium, in line with his or her *ex ante* preferences (partly overcoming the disincentive to exercise). Similarly some consumers overcome this bias by entering into self-binding contracts. They direct their "rational or disciplined" self to direct their "irrational or undisciplined" self. They may freely choose automatic payroll deductions for a Christmas saving club, for example, even if the effective interest rate is low. Some public policy implications of this behaviour are discussed below.

But if consumers over-value future opportunities (the free gymnasium, free use of an airline lounge, free support for software) this trait can also be exploited to encourage over-consumption. ("I didn't use it this year but I will next year.") Similarly, when presented with upfront benefits but longer-term costs, consumers are likely to over-value the upfront benefits, essentially subjecting themselves to a very high cost of financing those transactions. Examples include free financial advice (in exchange for trailing commissions on financial products), store discounts combined with "easy payment" terms, and utility contracts with attractive initial prices but which impose high costs on switching or prohibit switching for a long time period.

These biases are particularly relevant in relation to saving. People know it is in their interests to save but when the time comes to commit to saving, they do not. For example, people may have every intention of saving enough to pay off their credit card in the interest-free period, but the closer the deadline comes the weaker is their resolve.

Speakers mentioned in various forms the way in which consumer behaviour is influenced in terms of the "frame" in which a choice is presented. If a choice is presented in different ways, one of which appears to be framed as the "normal" choice, the default bias draws people to that option. For example, the statements "40 percent of customers choose option X" and "60 percent of customers choose other than option X" will elicit different notions of what is considered the normal or default choice. If a decision, such as a decision relating to an insurance product, is framed in terms of possible losses from not being insured, risk aversion tends to dominate and people tend to be conservative, and purchase more insurance than they need. If the same decision is framed in terms of possible gains (for example, the saving in not taking up high-cover insurance), people tend to be less risk-averse.[14] Sometimes the frame the consumer constructs might result in no market transaction taking place, to the possible detriment of both the consumer and supplier.

Also mentioned was the problem of "choice overload". This is similar in some aspects to the situation of "confusopoly" in that the consumer tends not to choose – either staying with the existing supplier or walking away from the market altogether, depending on the demand elasticity for the product in question. The empirical evidence suggests that past a certain point, the more competing products are offered the less likely consumers are to make any choice at all. (Psychological explanations are centred on the notion of regret – the more options people have, the more they have to reject, and each rejection involves a cost of contemplating "what might have been"). Two speakers provided examples from utility markets, indicating that choice overload exists in some member countries.

Public policy

It was not the intention of speakers to suggest specific measures to overcome demand-side market failures. Nor was it their intention to suggest that public policy has overlooked the demand side. Indeed, some of the findings of behavioural finance, a branch of behavioural economics which has been the subject

[14] See, for example, Johnson, E., Hershey, J., Meszaros, J. and Kunreuther, H., "Framing, Probability Distortions, and Insurance Decisions", and Camerer, C., "Prospect Theory in the Wild: Evidence from the field" in Kahneman, D. and Tversky, A. (eds) (2000), *Choices, Values and Frames,* Russell Sage Foundation.

of a great deal of research, have been incorporated into public policy. Rather, at this stage of the project, the intention was to raise questions of public policy and to suggest broad frameworks for consideration of possible improvements in policy making.

Consumer policy has a long history, but it is not always shaped into an economic framework. Rather, it has been considered from a legal perspective. *De facto*, it may mesh with economic considerations: product safety laws, for example, have economic benefits, but most would agree that pure economic evaluation is not an adequate basis for public policy when safety and health are at stake.

The basic public policy question, as in most regulatory issues, concerns the extent to which the benefits outweigh the costs of intervention. In the case of behavioural biases the added complication is that some interventions based on behavioural economics may actually reduce consumer choice, or provide a paternalistic guidance towards certain options through framing the way information is provided.

Of course, there have always been certain interventions in markets to control advertising, quite apart from restrictions on false and deliberately misleading claims. These include mandated disclosures and the encouragement of standards that simplify the purchase decision. Many member countries prohibit all or certain advertising relating to prescription pharmaceuticals, on the basis that most consumers lack the capacity to evaluate competing claims. And there is general agreement that people with less than fully-developed judgement, such as children or people suffering intellectual disabilities, require some level of paternalistic protection. These interventions, which can be seen as paternalistic, are not based on behavioural economics; some speakers suggested that behavioural economics does not, as yet, provide any basis for any further paternalistic incursions into markets.

One possible policy approach is to consider the extent to which interventions to protect some consumers (or, more rigorously, all consumers in some types of situations), impose costs on other consumers who may be better informed or more disciplined in knowing and overcoming their behavioural biases. Those who are well-informed, in terms of obtaining and using all available knowledge can be classified as “informed”; those who are aware of and who act to counter their behavioural biases can be classified as “disciplined”. The policy question is the extent to which interventions impose costs on those who are informed and disciplined (the “ideal” consumers who shape the “ideal” market in the conventional economic model).

At a minimum, it was suggested there could be a “no harm” approach to regulation. That is, a regulation could be acceptable if it helps the uninformed or undisciplined, without imposing significant costs on those who are sophisticated and disciplined.[15] (In economists’ terms, this would be considered a “Pareto” approach.) A stronger case would have to be made for interventions which do not pass such a test. In cases where cross-subsidies are unwound by such regulation, however, those who have previously benefited from such cross subsidies will lose out. There may not be many cases without any losers. Interventions which involve some losses to particular consumers would need to be evaluated on broad cost-benefit criteria which weigh the costs to the losers against the benefits to the winners.

One policy question was whether intervention should wait until there is clear evidence of consumer harm, or whether evidence of risk should be sufficient to trigger a policy response.

In relation to utilities – particularly the situation of “confusopoly” – several speakers mentioned the benefit of presentation of prices in standardised form, and the provision of devices such as price comparison calculators. There was no discernable disagreement on the benefits of providing consumers

[15] See for example, Camerer, C., Issacharoff, S., Lowenstein G., O’Donoghue, T., Rabin, M. (2003), “Regulation for Conservatives”, *University of Pennsylvania Law Review,* Vol 151, pp 1211-1254.

with comparative information in easily legible forms, although this issue was not discussed in depth. It was pointed out, however, that there are pitfalls in the regulation of price advertising. Such regulations can have the effect of deterring new entrants, for example.

In the area of behavioural economics, one example related to a soon to be implemented retirement saving scheme in a member country, which takes advantage of framing, default biases, and the endowment effect to encourage savings behaviour. Under the scheme all new employees over 18 years will be automatically enrolled in work-based savings schemes with a default 4% payroll deduction towards retirement saving. Where a provider is not selected a default will be provided. Employees can opt out of the scheme, but it is expected that many will not do so. This contrasts with saving schemes which ask the employee to choose a retirement savings plan from an open field without any default, and with those which rely on compulsion.

Several speakers suggested that many current interventions can be justified from a number of perspectives – conventional economics, behavioural economics or social justice (which is partially embraced by the behavioural economics finding that consumers seek fairness for its own sake). Although the definitions and terminology of behavioural economics are comparatively new – mainly developed in the second half of the twentieth century – some of these biases have been known for a long time. In fact they are well-known in the discipline of marketing which, in comparison with economics, has a much stronger record of integration with psychology. A mandatory cooling-off period, for example, can be justified in terms of conventional economics in terms of providing time to obtain more information, but it can also be justified in terms of overcoming the bias of hyperbolic discounting or myopia. Laws against usury can be seen in terms of social justice, but they can also be seen in terms of overcoming the problems of hyperbolic discounting. In fact, in member countries people already use their elected governments to make certain paternalistic choices, such as use of seat belts, and compulsory taxes or levies for retirement savings.

When market transactions are analysed from a behavioural perspective the conventional economic notion that preferences are stable is eroded. Similarly the notion that economic outcomes can be analysed purely in terms of individuals' immediate self-interest is eroded; people may seek a degree of distributive justice that overrides their self-interest. In this context reference was made to John Rawls' notion of an "original position",[16] one speaker suggested that because people's experience in markets shape their preferences, and because they are aware of this effect, they may deliberately seek a degree of paternalism in some markets. For example, because certain drugs are addictive, people choose to set rules which prohibit the supply of such drugs, because once drugs of addiction are taken, by definition, demand becomes inelastic. All member countries have prohibitions on certain addictive drugs, but these prohibitions generally have not been considered in the framework of behavioural economics.

There was a general consensus on the need for more applied and policy-related research, particularly in behavioural economics and the interface between economics and the law. The findings of behavioural economics have been well integrated into the discipline of marketing; in fact a number of speakers related marketing practices to behavioural economics. But marketing research is usually undertaken by corporations, is seldom in the public domain, and is sales-related rather than policy-related.

And there were warnings about unintended or adverse consequences of regulations. One such warning was that regulations to restrict advertising in order to protect impressionable audiences can have the

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16 The philosopher John Rawls suggests that people presented with a choice of rules may choose rules that limit their own choices. He posits the notion of an "original position", being the thought experiment in which people are asked to suggest the constitution of a society if they do not know their own place or opportunities in that society. Rawls, J. (1971), *A Theory of Justice,* Harvard University Press.

consequence of suppressing useful information. There was also a warning about the dynamics of markets – in many situations consumers and suppliers are in a dynamic situation of mutual learning; the regulation to solve today's problem may become unnecessary or even counter-productive tomorrow.

On the issue of regulation there was no disagreement (and therefore little discussion) on the general point that some regulation can be ineffective because of poor assessment of its impact, or worse, is costly in terms of imposing high compliance costs on firms. It is possible that behavioural economics can give some guidance as to how regulation can be imposed with a lighter hand. For example, when market failure is addressed in terms of conventional economics, there is often an inclination to require the disclosure of more information. The consequence of a surfeit of information can be information overload, and an opportunity for firms to engage in deliberate "confusopoly". Quite often, governments refrain from expanding information requirements on the basis that the costs to consumers and producers outweigh the benefits. The findings of behavioural economics, particularly those relating to framing, may provide opportunities for reviewing regulations relating to disclosure that are clearer to consumers and providers.

The strongest message came back to the purpose of competition policy: it is not an end in itself. Rather, it is one of several means to achieve market outcomes which satisfy consumer needs. Goal-displacement is common in public policy: means acquire the status of ends. Consumer welfare does not involve some tradeoff of economic objectives; rather it is a central objective of economic policy.

2. SUMMARIES OF SPEAKERS' PRESENTATIONS

The summaries that follow are based mainly on speakers' oral presentations to the Committee. The written papers from three speakers in the first session are in Appendix III.

INTRODUCTORY COMMENTS

by Tony Sims,
Chair of OECD Committee on Consumer Policy and Director, Department of Trade and Industry, United Kingdom

This is the first discussion of this kind to be held by the Consumer Policy Committee. Although this is probably our initial exploratory Roundtable on these important issues, it is also an opportunity to make some major progress in our thinking.

Louise Sylvan, in her introductory comments, outlines where this discussion might sit in relation to the expertise of consumer policy decision makers and consumer enforcement agencies and what these discussions might mean for our future policy and practice in our home jurisdictions. The central theme, however, underlying the whole of our discussion is that analysis of markets – and whether markets are working effectively or not – is something that must be undertaken with both a competition focus and a consumer focus. And that the "know-how" of these two areas of expertise is not the same. This begins a very important dialogue about how we shape the economic advice we give to governments about the market – from the consumer side of the equation.

Today's Roundtable explores the critical and practical decision of if and when governments should be intervening in markets in order to deliver consumer empowerment and/or consumer protection.

Importantly, in developing a focus on markets from a consumer perspective, it is necessary to consider not only what I will call conventional economic analysis – to use a shorthand for it – which looks at consumer issues such as search costs, the lemons problem and so on; it is also important to consider the newer insights that are emerging from behavioural economics – that consumers often do not behave as conventional economics predicts and that such behaviour is important in assessing not only consumer outcomes in markets but also competition outcomes as well.

These issues are covered today with the aim of moving forward in sketching what a proper methodology would be for looking at markets from the demand side. The crucial question at the centre of this discussion is what information and what analytical tools and methodologies should we focus on in order to strengthen our ability to take considered policy decisions which ensure that consumer interests are at the heart of competition and consumer policy decision making.

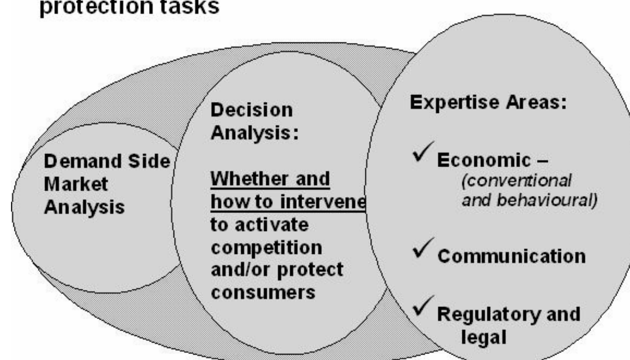
INTRODUCTORY COMMENTS

by Louise Sylvan
Deputy Chair, Australian Competition and Consumer Commission

Tony Sims has provided a very clear outline of the purpose and scope of the Roundtable. To this outline can be added the context of the task – specifically in terms of how this discussion fits into the overall work of consumer empowerment and protection.

Broadly, the "map" of the tasks of empowerment and protection involve analysis of the demand side of the market, followed by decision analysis which is focussed on whether and how to intervene to activate competition in a market or protect consumers. The expertise areas required for the analysis and the implementation of any intervention strategy are economics – both conventional and behavioural – a strong knowledge of effective communication where that is the appropriate tool to be used, as well as the regulatory and legal expertise which is also essential for the general consumer protection tasks which we undertake.

Figure 2. Consumer empowerment and protection



A market analysis with a demand side lens is quite distinct from one carried out for competition purposes. Even if one is using similar analytical tools, such as conventional economics, the focus is so importantly different that it is like taking a picture from a completely different angle. Sometimes it can even be difficult to recognise that it is the same subject (*i.e.* the same market) that is being examined. The key issue for a demand-side economics is answering the question "what is actually going on in terms of consumer outcomes?" The question involves examination of the product features such as complexity, credence issues and so on, as well as consumer choice issues and how the product or service is being offered or presented; one of the most important insights of behavioural economics is that it is not only the product that matters but the context as well.

The next task involves analysis of the amenability of the problem to rectification, and the benefits and costs of either acting or not acting.

From a proactive perspective, this type of analysis should be carried out in markets that are being reformed or deregulated before that occurs. While competition economists look at the shape of the market (the structures, number of firms and so on), they pay no attention to the consumers' ability to choose and thus drive competition. The way in which a deregulation is carried out, in terms of how consumers are likely to behave under various alternatives, is a crucial matter and one primarily for a new demand-side expertise.

CONSUMER PROTECTION ECONOMICS: INSIGHTS FROM NEO-CLASSICAL ECONOMICS AND PRACTICAL APPLICATIONS FOR POLICY-MAKING[17]

by Joseph Mulholland,
Economist, Federal Trade Commission, United States

Consumer protection economics

In its widest sense, consumer protection economics is concerned with a wide variety of government actions that have either the explicit or implicit aim of protecting and enhancing consumer welfare. In this presentation, however, it is defined in a narrower sense to encompass those markets which are structurally competitive and where prices and outputs are set by market forces rather than by regulatory processes. So defined, consumer protection can be viewed as a search for market failure where government intervention may be justified.

The economic ideal of welfare maximisation is achieved when all parties – sellers and buyers – are well-informed in competitive markets where all gains from trade can be realised.

Information, however, is a scarce good that can be analysed in much the same way as other traded goods. The acquisition of information, therefore, is limited and so falls short of what is required for achieving the economic ideal.

There are situations, therefore, where government interventions, through assisting information flows, can improve market outcomes. Interventions include prohibitions on false or misleading claims, mandatory disclosures, health and safety standards, and prohibitions on certain pricing structures. Regulators should appreciate that while markets can fail, so too can regulators, and that actions to help some consumers may hurt others; they should be guided by benefit-cost practices.

Regulation of advertising

The regulation of advertising provides a case study. When an advertisement is clearly fraudulent, the regulator's task is straightforward. But there is a large amount of advertising that contains no false statements, but which carries implied messages which are misleading to consumers. The regulation of such advertisements is particularly problematic. Consumers vary in the kinds of messages they take from an advertisement as well as the importance they attach to various claims. The regulator must weigh the probabilities and costs of a "type 1" error – the consumer detriment from allowing a deceptive claim and a "type 2" – the cost of suppressing a non-deceptive claim that provides useful information to consumers.

In assessing the likely effects of regulation, the FTC relies on an extensive body of research into how consumers perceive information and how they act on this information in making their purchase decisions. Economic theory, heavily influenced by the economics of information, has developed a relatively nuanced view of information flows that takes into account various limitations on the way consumers process information and how they adjust to these constraints when choosing among products and services in the market place. For example, consumers are viewed as "bounded" by their ability to process information, which gives rise to heuristics such as reliance on a firm's reputation and other price and quality signals. This theory in turn guides research into a wide range of consumer behaviours that provide insight into the identification of potential market failures and how they can be most efficiently remedied. Research techniques utilized by the FTC include copy tests, consumer surveys, and the use of aggregate market data in testing for the impact of various advertising regulation rules on consumer decision making.

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[17] See more detail in Appendix III.

Behavioural economics

Although the conventional economic model sees consumers as bounded by the various costs of acquiring and processing information, it does presume a degree of rationality on the consumer's part. In particular, consumers are assumed to know their preferences and have the ability to go about satisfying them in a consistent manner. Advocates of the behavioural economics approach offer a number of challenges to this rationality assumption. Using results from various branches of psychological research, behavioural economics describes ways in which people sometimes fail to behave in their own best interests, due to such behavioural traits as self-control problems, failure to process information objectively, and mispredictions about the costs and benefits of prospective choices.

Policy interventions can be grouped into two general types, based on the way in which behavioural research is interpreted. A paternalistic interpretation is that consumers are incapable of processing information adequately, and therefore need to have some choices made for them. The other interpretation is that public policy can use the findings of behavioural economics to focus on "debiasing"; that is, preserving consumer choice by generating more effective information and presenting this information in ways that lead consumers to more welfare enhancing choices. In line with this latter approach, the Federal Trade Commission is using behavioural research in its fraud and deception programmes.

Consumer protection at the FTC is consistent with the debiasing approach to the extent that both seek to develop information policies that expand rather than restrict consumer choice. The psychological research into individual decision making emphasised in behavioural economics can provide a useful complement to the kinds of consumer research currently utilised at the FTC and other consumer protection agencies. Since most of the behavioural economics research relevant to consumer protection matters is based on laboratory experiments, it is important to assess the external validity of experiments conducted in the laboratory with a relatively small number of subjects.

DECISIONS AND POLICY: A BEHAVIOURAL PERSPECTIVE[18]

by Eldar Shafir,
Professor of Psychology and Public Affairs, Princeton University

The dominant economic view assumes that consumer behaviour can be modelled as if consumers were well informed, with impeccable self-control, selfish, calculating, and that they have stable preferences. Behavioural studies, empirically based, suggest consumers are impulsive, myopic, trusting and distracted, that their preferences are highly malleable, and that their judgment is often poor.

By necessity, consumer decisions are not directly based on objective states of the world but rather on people's mental representations of those states. And the relationship between states of the world and the way they are represented is not one to one; rather, it is heavily context-dependent, with the representation of choice situations systematically influenced by the consumer's sometime momentary social context (*e.g.* identity) and experience, the way a problem is described, as well as specific procedures through which preferences are elicited.

Behavioural departures from the dominant model show certain consistent biases. People do not flail around in unpredictable ways; rather they exhibit systematic and predictable patterns of non-normative behaviour. Behaviour is guided by a variety of cognitive and affective processes over which people have little control, and into which they have little introspective awareness. Thinking about people's behaviour solely in their role as economic agents limits the potential insight and effectiveness of our policies.

While some findings are based on laboratory studies, there is a growing body of research of consumer behaviour in actual markets. "Benign paternalism" in the form of default schemes with opt-out provisions are more effective in generating behaviours that are socially beneficial than opt-in schemes. An example is provided by national rates of willing organ donors, where opt-out schemes yield massively greater participation rates than do opt-in arrangements.[19]

Research in the consumer credit market finds that customers are heavily influenced by various "psychological" features of offerings that, from a normative perspective ought to have no impact, and that prove most influential for the least advantageous products. Marketing messages that don't appear intended to persuade are more effective than more explicitly persuasive ones. Personal attributes such as educational background have little effect on the quality of many such decisions.

In some other markets an overload of choice can lead consumers not to make any choice at all. A behavioural economics perspective can help make sense of what might otherwise be seen as economic "puzzles" in the behaviour of consumers, including purchasing behaviour, financial and savings behaviour, as well as the take-up of benefits programmes, and decisions made by the poor. In particular the experience of the poor when dealing with a financial institution or government agency is likely to result in a representation of a situation which is rather different from that envisioned by the dominant "rational" view of consumer behaviour.

A behavioural analysis suggests that substantial welfare changes may result from relatively minor policy interventions, and that in policy development behaviourally insightful design, implementation, and regulation can greatly contribute to the success of policies. Policies should aim to provide helpful contexts for consumers – contexts that help them channel their decisions towards decisions that are socially beneficial and, in fact, consistent with consumers' self-interest.

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[18] See more detail in Appendix III.

[19] For another example, see the presentation to this Roundtable on Kiwisaver by Liz MacPherson.

CONSUMER RISK: SOME BUILDING BLOCKS FOR POLICY[20]

by Rhonda L. Smith
University of Melbourne

Consumer risk arises from market failure, but not all market failure results in consumer risk. For example, a restriction of choice to compensate for negative externalities would not be considered as a detriment to consumers.

Conventional demand theory is not sufficient for analysing consumer risk; its explanation of the shaping of market outcomes is too parsimonious. Consumer tastes and preferences are shaped by many factors, including culture, peer pressure and advertising.

Market risk resulting from market failure

The conventional economic model relies on competition to deliver consumer choice and therefore maximum consumer welfare and efficient resource allocation. Competitive pressure, however, may provide an incentive for some producers to exploit consumers, for example through making false or misleading claims and providing inferior quality products. This occurs when there are impediments to the free flow of information.

In some situations information is simply not available in a manner that helps consumers. The volume of price and product information, ever changing, may be such that the consumer (and perhaps the producer) lacks the capacity to make useful price or quality comparisons. In some others, such as the case of Akerlof's "lemons", asymmetric information results in under-provision and therefore under-consumption of high quality products. In such situations there is not only consumer detriment but also economic ("deadweight") loss.

Consumer risk arises particularly in the case of credence goods (which, by definition, involve information asymmetry). This risk is heightened when there are pressures, such as incentives on salespeople to sell particular products that may not suit the consumer's requirements. Some large purchases such as financial products and houses fall into this category.

Consumer-based risk

In some cases consumers have access to information but do not use it to maximise their individual welfare. Conventional economics acknowledges that even for experience goods, investment in search may have rapidly diminishing returns in markets subject to rapid change. When decisions have to be made under pressure search activity is not possible.

Behavioural economics gives further insights into phenomena such as herding, which results in the displacement of useful private information by capricious herding signals (to the detriment of both consumers and producers). Consumers make decisions based on simple and often misleading heuristics. As a result, consumer choice analysed *ex post* does not align with *ex ante* consumer preferences. The better our understanding of consumer behaviour, the better we will be able to identify situations where consumers are at risk, thus providing a basis for determining whether a policy response is justified and if so, its appropriate form.

The guiding principles for policy responses to such dysfunctional markets are that they should be restricted to situations where self-correction is unlikely, they should be welfare-enhancing (that is, benefits should clearly outweigh costs), and the interventions should be situation-specific. An unresolved policy question is whether a policy response should respond to risk, or should wait until there is evidence of clear consumer harm.

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[20] See more detail in Appendix III.

ENDOGENOUS PREFERENCES AND CONSUMER PROTECTION: A VIEW FROM JAPAN'S LEGAL PERSPECTIVE[21]

by Koichi Hamada
Professor of Economics, Yale University

The findings of behavioural economics present substantial conceptual critics to the conventional mode of economic thinking that is primarily based on rationality.

The point of departure of behavioural economics lies in the way in which it treats consumer preferences. Conventional economics sees preferences as pre-existing and exogenous to the economic universe that determines market prices, quantities, and resource allocation. Behavioural economics sees preferences as being formed by consumers' experiences in markets; preferences are endogenous to the economic universe.

Behavioural biases such as the endowment effect and myopic discounting can be understood from the perspective of endogenous preferences. They are, however, often explained by the lack of information on the part of consumers. Those two explanations are sometimes observationally equivalent; experiments are short-term or snapshot trials and they lack the capacity to identify the cause of biases by observing the time paths of human behaviour over a length of time.

Regarding the policy implications, endowment effects may reinforce the ground for some existing government interventions. Even without having to seek behavioural anomalies - anomalies form the conventional economist but the state of affairs from behaviourists - however, some paternalism is justified within the discipline of conventional economics appealing to externalities and information deficiencies. Regulation against pyramid schemes, door-to-door sales, food and equipment safety, contagious diseases and smoking can all be explained by externalities and the lack of information as well.

Japanese laws mostly intend to correct the problems arising from imperfect or incomplete information. Little intent is seen at their legislation process to take account of endowment biases. A few exceptions are laws such as the Act on Narcotics and Stimulants, the Act on Anti-hypnotic, and Usury Laws; even though behavioural biases are not specifically acknowledged, they are well interpreted as measures to encounter behaviouristic biases.

Under endogenous preferences, welfare economics and, accordingly, the principle of judging the effect of economic policies, are in trouble. Conceptual devices such as Rawls' social contract theory may be brought in to resolve this philosophical problem. Legal conservatism, which tends to favour the *status quo* in court decisions, can be seen as a manifestation of the endowment effect. This also explains why readjustment after court decision can be small.

In short, though results from behaviour economics may strengthen the case for some policy interventions, they do not provide dramatically strong cases for new interventions. Government interventions that correct these problems need much more information about consumers and the market than is feasibly observable in the market economy.

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21 See more detail in Appendix III.

REALITY BITES – THE PROBLEMS OF CHOICE[22]

by Catherine Waddams
Member, Competition Commission, United Kingdom, and Director, Centre for Competition and Consumer Policy, University of East Anglia

Is more choice always beneficial to consumers and markets? To what extent do consumers *underswitch* (that is, stay with a high-price supplier to their disadvantage), *overswitch* (switch too often for their benefit), and *switch inefficiently* (to higher-priced suppliers)?

Evidence from low income electricity consumers shows that many made apparently poor decisions. Most did not switch despite considerable potential benefits from doing so; some switched to a more expensive supplier and very few switched to the cheapest available. Some specific findings:

- Thirty-two per cent of switching consumers changed to an entrant charging *more* than the firm they were switching from, creating an average loss of GBP 16.53 (USD 29) per household.
- While the average maximum gain available was GBP 53.91 (USD 94), the annual average gain was only GBP 12.55 (USD 22) which means that consumers were only taking 23% of the available surplus.
- Only 7% of consumers achieved the maximum saving from their switch of electricity supplier.
- The decision to switch (once the consumer was aware of the ability to switch) was not responsive to the maximum savings available. It also appeared unresponsive to the number of competitors. However, an increase in the number of firms reduces the gains made by switching consumers relative to the maximum available.

Evidence would suggest that switching mistakes by consumers are caused by “decision complexity” rather than by factors explained by conventional theories of rational decision-making.

These findings suggest that better consumer pricing information is needed and that, contrary to conventional wisdom, reducing choice may sometimes increase benefit.

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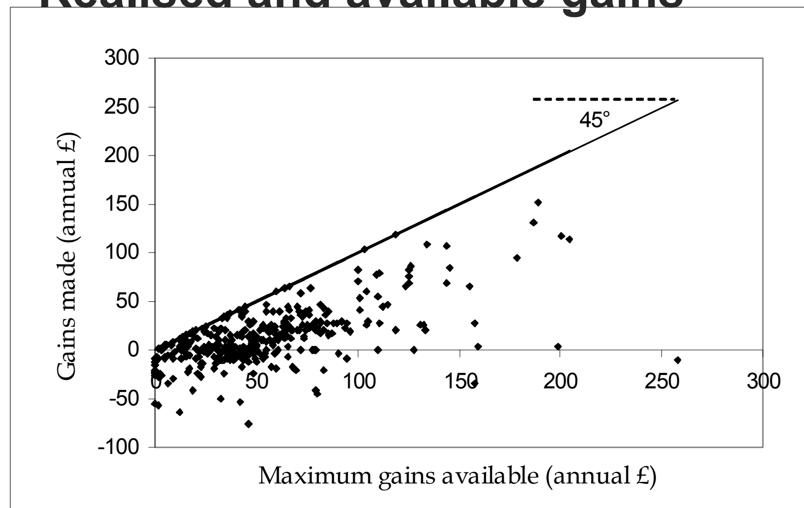
22 The full paper “Irrationality in Consumers’ Switching Decisions: when more firms may mean less benefit” is available from the Web site at: www.ccp.uea.ac.uk/public_files/workingpapers/CCP05-4.pdf

Figure 3. Realised and Available Gains



Note: Since the conference, the authors have identified some data processing errors in the analysis; they have not yet had a chance to rework their figures, but do not believe that it will change the nature of their findings substantially. As soon as a corrected version of figure 3 is available, it will be provided to the Committee on Consumer Policy.

Source: Chris M.Wilson and Catherine Waddams, "Irrationality in Consumers' Switching Decisions: when more firms may mean less benefit", ESRC Centre for Competition Policy, School of Economics and School of Management, University of East Anglia, CCP Working Paper 05-4, Figure 1.

CONSUMER EXPERIENCE IN THE UK ENERGY MARKET

by Allan Asher,
Chief Executive, Energywatch, UK

The role of Energywatch is to equip and enable consumers to act in their own interests where they can, but to act on behalf of those consumers who cannot. Energywatch is a publicly funded “consumer champion”, operating through campaigns, lobbying and advocacy, and by persuading the regulator, Ofgem. While Ofgem’s operations tend to be guided by conventional economic theory, Energywatch provides the behavioural insights into consumer decision-making.

Following energy liberalisation the UK’s gas and electricity markets were highly competitive. Deregulation in the 1990s reduced prices, broadened supplier choice and reduced the incidence of fuel poverty. In recent years, however, these gains have been eroded. Unchecked vertical and horizontal amalgamations have reduced the market from one in which 16 vigorously competing suppliers and independent gas producers and generators have become 6 vertically integrated oligopolies. Prices over the past 18 months have risen towards pre-liberalisation levels: domestic gas prices have risen by 21% and electricity by more than 17%; and businesses have seen increases of up to 60% since April 2003. Choice of supplier has been reduced by consolidation.

Consumers who at first actively embraced choice have been reluctant to switch suppliers. Seven years after liberalisation half of customers had not moved from their original supplier. This reluctance, despite the savings on offer (Energywatch estimated bills could be cut by up to half) was due in part to business practices and a failure of regulation. Contrary to the assumptions of conventional economics, consumers do not switch, mainly because of complexity. In response to surveys, only a quarter of consumers find price comparisons between suppliers “very easy” or “fairly” easy”; 42% have never tried to switch. Energy suppliers make switching time-consuming and prone to mistakes, bills are difficult to understand, energy usage is hard to calculate and because of different billing systems price comparisons are very difficult. (Energy suppliers admit that they value the flexibility to differentiate their bills from those of their competitors.)

The UK energy market is a good example of what happens when markets are de-regulated with insufficient understanding of, or interest in, the impact on consumers. Many suppliers are not customer-focussed except in terms of winning new customers. They take advantage of customers’ inertia and their lack of confidence in the market – a lack of confidence that has resulted from the processes of deregulation. Reliance on market-based mechanisms falls short of the ideal: more choice does not automatically empower consumers to make the best choice.

The consumer voice is potentially powerful but weak in practice. Education, information, self-regulation and transparency have to be part of a consumer protection package but so do regulators who intervene in markets to prevent detriment, even when this reduces competition by reducing differentiation between suppliers. Industry self-regulation and co-regulation should be incentivised and, if necessary, mandated to improve confidence in markets. Regulation and consumer policy should be based on real consumer experience and understanding of consumer detriment and what affects consumer choice. In fact it is not clear what “choice” means to consumers in energy markets. Without this knowledge it is difficult to identify market indicators which could provide early warning of consumer detriment.

We have to be clear about what it is we want from competitive markets: do we start from the need to enhance the economic and social welfare of consumers; or do we start from the need to improve the productivity, innovation, efficiency and competitiveness of business? These two are not always synonymous.

Once we know which should be given priority we will stand a better chance of deciding what interventions and what consumer actions are required.

RECOMMENDATIONS ON MOBILE PRICE TRANSPARENCY

by Alípio Codinha,
Department of Regulated Markets and State Aid, Portugal

The Portuguese Competition Authority (PCA) exists to ensure compliance with competition laws in Portugal, with the objective of giving the economy well-functioning markets, efficient resource allocation and welfare maximization.

Since May 1, 2004, the Authority has also been a decentralized entity for the application of community competition legislation.

There are three mobile phone companies in Portugal; the first firm entered the market in 1991, with competitors entering in 1992 and 1998. By 2003 the market was beginning to saturate, with 11 million subscribers and a penetration rate estimated at more than 100%. Market shares seem to have stabilised, with the earliest entrant still holding almost half the market, and the latest entrant holding the smallest share.

There is evidence that competitive benefits are not being realised. The Portuguese Consumers Institute and the PCA found there is a proliferation of tariff plans – hundreds for each mobile operator. As result of that proliferation, a survey in 2005 showed 90% of consumers had the "wrong" tariff choice, and that each consumer could save more than €100 a year even without changing supplier. A study by the European Commission found that while market penetration is high, competition is not as strong as it was at earlier times. All firms had announced recent price rises.

Benchmark studies indicate that between 2003 and 2004, the price of mobile communications in Portugal increased, while in the majority of the countries of the European Union prices fell, in some countries by more than 30%. The Portuguese telecommunications regulator found that Portugal's wholesale call termination prices in 2004 were 45% above the European average, and imposed a significant price decrease.

Policy response

Mobile retail prices are not regulated. But market forces are not working; there is a lack of price transparency and mobile operators do not provide hard, quantitative advice to customers.[23]

There are legal provisions available to regulate the way prices are advertised; these provisions have already been invoked in many industries. The proposed and foreshadowed approach in the case of mobile telephones is to require mobile operators on their websites and all their selling points (in light of the low household computer penetration in Portugal) to provide calculators or simulators that customers can use to find the best tariff plan for their profile of use, their monthly expenditure and any important contractual conditions associated with that plan.

23 For further details see Recommendation 2/2005 of the Competition Authority. An English version of the Recommendation is available at: http://www.autoridadedaconcorrencia.pt/vImages/recomendation2_2005.pdf.

ECONOMICS IN THE MARKETPLACE: HEALTH CLAIMS IN ADVERTISING

by J. Howard Beales III
Associate Professor of Strategic Management and Public Policy, George Washington University

Health claims in food advertising provide a valuable case study of the impact of advertising. Widespread advertising that began in 1984 offered a unique opportunity to observe their market impact, and a series of US Federal Trade Commission (FTC) staff studies documented the effects of changes in regulations relating to food advertising.

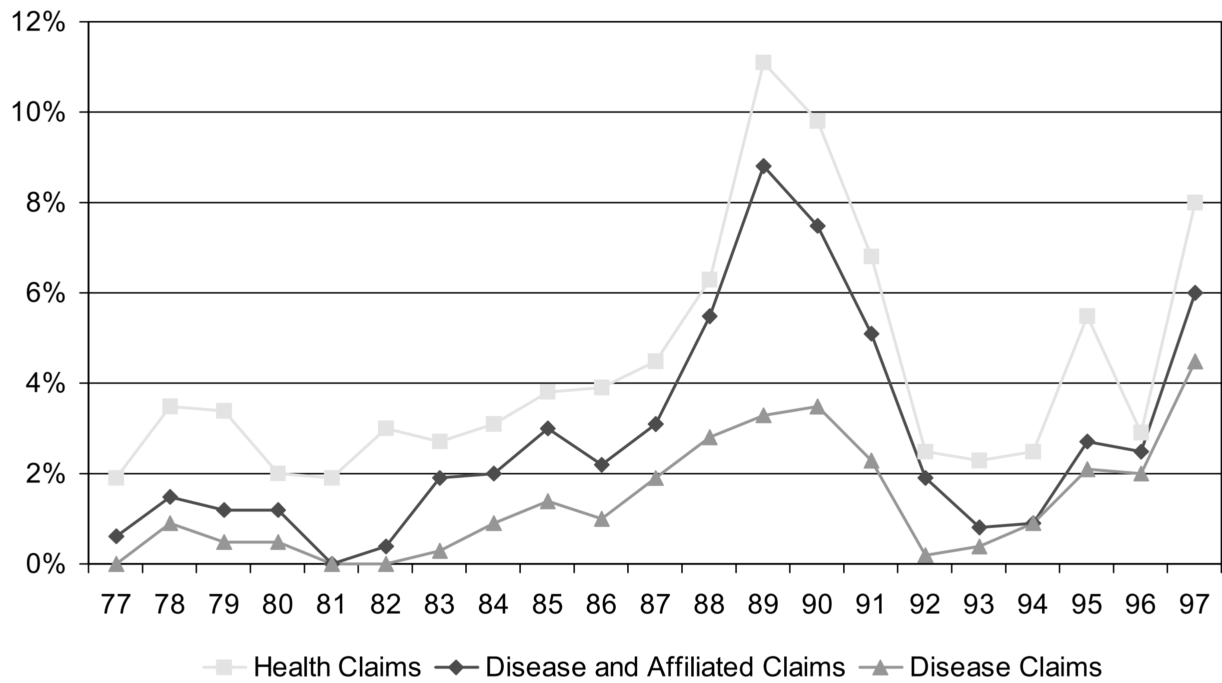
The FTC's cereal study evaluated whether policy changes that took place in the mid-1980s, allowing food manufacturers explicitly to link diet to disease risks in advertising and labelling, improved consumers' food choices, or, as critics feared, confused consumers sufficiently to slow improvements in diet that would otherwise have occurred. The study found that food manufacturers' health claims for high fibre cereals led to an increase in fibre consumption, increases in the fibre content of the typical cereal, and increased knowledge about the relationship between fibre consumption and cancer risk. The greatest gains in knowledge and behaviour were among the most disadvantaged consumers.

Another study in 2002 "Advertising, Nutrition and Health" reviewed magazine advertising to test the effect of the regulatory environment on health claims in advertising. It found that regulatory efforts to restrict health claims have resulted in substantial declines in the amount of advertising that discusses the relationship between diets and health.

A study of fat consumption finds that the period of extensive health claims in advertising led to significant decreases in consumption of fat and saturated fat.

The general conclusion from these studies is that market incentives provide valuable information for consumers. Efforts to fine-tune advertising can result in less information for consumers, and regulators should be sceptical about consumer protection rationales that reduce available information.

Figure 4. Percentage of advertisements with health claims



Source: Advertising Nutrition & Health: Evidence from Food Advertising 1977 - 1997, Bureau of Economics Staff Report, Federal Trade Commission, September 2002, Page 4.

KIWISAVER – A BEHAVIOURAL APPROACH TO THE CASE OF THE RELUCTANT SAVER[24]

by Liz MacPherson
Deputy Secretary, Ministry of Economic Development and General Manager,
Ministry of Consumer Affairs, New Zealand

"KiwiSaver", a new New Zealand work-based savings scheme to be implemented in 2007, is the first government scheme in the world to be designed using behavioural finance principles to encourage saving.[25]

New Zealand has the lowest household savings rate (as a percentage of disposable income) of all OECD countries; it presently stands at minus 6.5%. Household financial wealth has fallen from 112% of disposable income in 1993 to 44% of disposable income in 2003. This decline has long-term implications for people's quality of life in retirement and, in the medium term, for macroeconomic management in terms of interest rates, investment, current account balances and growth.

Behavioural finance research suggests that in addition to the basic problem of figuring out how much to save, a number of behavioural biases affect savings behaviour. These include the biases of procrastination and myopia (hyperbolic discounting), status quo (or the "endowment effect"), self-control limitations – all of which combine to result in a lower level of saving than people rationally desire.

Kiwisaver makes use of behavioural research to turn a negative into a positive and make inertia work in favour of employees. Under the proposed scheme, all new employees in a firm over the age of 18 years are automatically enrolled in a saving scheme, with a contribution rate of 4% of salary, and are allocated a default provider if none is selected. The scheme is voluntary and people can opt out within a limited time span after starting a new job and can apply for contribution "holidays". However, it is anticipated that the impact of behavioural biases will make it highly probable that many employees will remain in the saving scheme.

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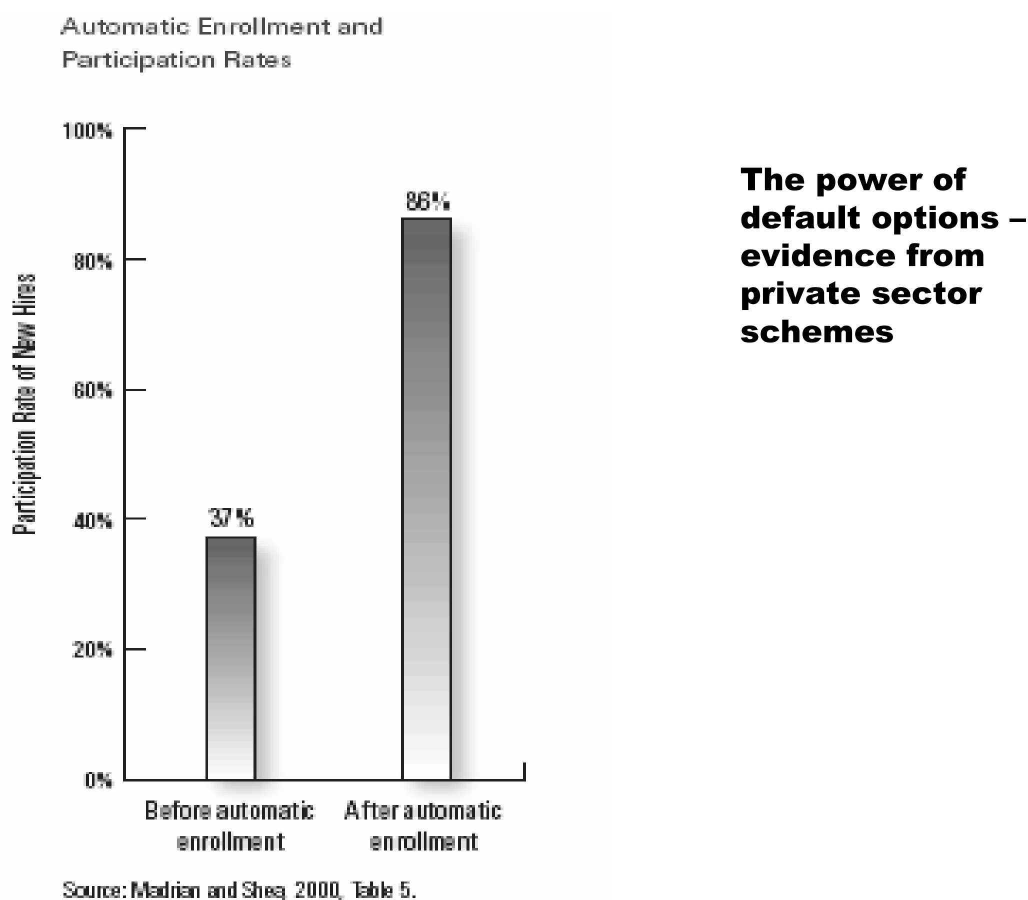
24 For detailed information, see the New Zealand Inland Revenue Web site http://www.ird.govt.nz/kiwisaver/

25 A number of private sector schemes have been designed using behavioural finance principles and considerable empirical evidence is available on the impacts of such design features. See for example, Madrian, Brigitte C. and Shea, Dennis F. (2001), "The Power of Suggestion: Inertia in 401(k) Participation and Savings Behaviour", *Quarterly Journal of Economics*, 116, Number 4, pp 1149 – 1187 (39) and in particular, Thaler, Richar H. and Benartzi, S. "Save More Tomorrow: Using Behavioural Economics to Increase Employee Saving", *Journal of Political Economy*,,Vol.. 112, No.1, ppS164 – S187, February 2004.

Figure 5. The power of default options



The power of default options – evidence from private sector schemes

Source: Utkus, Stephen P. and Young, Jean A. (April 2004), "Lessons from Behavioural Finance and the Autopilot 401(K) Plan", p 5. The Vanguard Center for Retirement Research. Data sourced from Madrian and Shea.[26]

[26] See footnote 23 above.

APPENDIX I. AGENDA

INTRODUCTION

Tony Sims & Louise Sylvan

SESSION 1:
LOOKING AT THE MARKET WITH A CONSUMER LENS ON: ECONOMICS FOR THE DEMAND SIDE

Insights from neo-vlassical economics and pactical aplications for plicy mking
Dr. Joe Mulholland
Economist, US Federal Trade Commission

Insights from behavioural economics and practical applications for policy making
Prof. Eldar Shafir
Psychology, Princeton University

Combining the insights:
Understanding consumer risk – Laying the building blocks
Ms. Rhonda Smith
Economics, University of Melbourne
(presenting joint paper of Joshua Gans, Melbourne School of Business, Stephen King, Member, ACCC and Rhonda Smith)

Do endowment effects necessitate paternalism? A consideration from Japan's legal practices
Professor Koichi Hamada
Economics, Yale University

DISCUSSION and QUESTIONS

SESSION 2:
POLICY AND PRACTICE

Reality bites – The problems of choice
Prof Catherine Waddams
Member, UK Competition Commission, and
Director, Centre for Competition Policy
University of East Anglia

Case illustrations:
On the ground experience – intervening or proposed interventions in markets

1. Energy:
Mr. Allan Asher, Director
EnergyWatch, United Kingdom

2. Telecommunications:
Mr. Alípio Codinha, Economist
Department of Regulated Markets and State Aid
Portugal

3. Health
Mr. Howard Beales, Associate Professor
George Washington University
United States

4. Retirement Savings
Ms. Liz McPherson
Deputy Secretary, Ministry of Economic Development and
General Manager, Ministry of Consumer Affairs
New Zealand

DISCUSSION and QUESTIONS

SUMMARY: FUTURE DIRECTIONS
Ian McAuley and Louise Sylvan

Closing Comments
Tony Sims, Chair OECD/CCP

APPENDIX II. BEHAVIOURAL BIASES

Behavioural economics is a fast-growing area of research, with interested stimulated by the awards of the Nobel Prize in Economics to Daniel Kahneman in 2002 and to Thomas Schelling in 2005. This recent publicity may have contributed to a perception that behavioural economics is an infant discipline, but it has an academic legacy of at least 50 years. The work of Kahneman and Schelling goes back at least 30 years.

Edward Chamberlain published the results of his experiments on behaviour in imperfect markets in 1948; Maurice Allais published his research on choice under uncertainty – findings that would later be incorporated into prospect theory – in 1953; the late Amos Tversky, Kahneman's colleague, was publishing his earliest findings in 1967.[27]

Behavioural economics – its relation to conventional economics

Behavioural economics is not entirely divergent from conventional economics. Rather, it approaches economics from a different direction – empirical rather than deductive. Most scientific-based disciplines, such as physics and engineering, accommodate these approaches, even when they reveal anomalies at their interface.

In many cases the findings of experimental and behavioural economics – studies of how consumers actually make choices – align with the predictions of conventional economics. In most markets the aggregate behaviour of consumers does indeed conform with conventional models.

The main finding of behavioural economics is that in many situations there is a set of consistent biases away from the behaviour which would be predicted by rational models.

These biases are generally based on heuristics – simple rules of thumb which we use in day-to-day decision-making. These heuristics are functional in most situations; many of them are useful in so far as they keep search costs within tolerable limits. They are the essential tools of "bounded rationality". There are situations, however, where they systematically lead us away from optimality. These situations are of academic and policy interest, for they lead to what can be termed as "costly biases" – costly because they lead to transfers from consumers to producers and to economic loss.

Generally, we are unaware of these biases. Sometimes, however, we do consciously depart from "rational" decision-making. For example, we often seek fair or just outcomes in markets, even when we know this may be to our own material detriment.

These biases cannot be explained away in terms of information failure. Even fully-informed consumers, or those who have the capacity to obtain information at low cost, may not use information in the ways predicted by the rational model of decision making. Framing biases, which rely on presentation of information in ways which are logically identical but emotively different, provide a case in point. One's decision whether to buy or not depends not only on what we know about the good on offer, but also on the frame in which we see it.

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27 Chamberlain, E. (1948), "An Experimental Imperfect Market," *Journal of Political Economy*, 56, pp 95-108. Allais, M. (1953). "*Le comportement de l'homme rationnel devant le risque, critique des postulats et axiomes de l'école Américaine*" *Econometrica*, 21, pp 203-546. Tversky, A. (1967). "Additivity, utility and subjective probability," *Journal of Mathematical Psychology*, 4, pp 175-201.

Conventional economics could lay claim to explaining framing and similar biases by suggesting that consumer choice comprises two components – a good and its frame (that is, the way it is presented or its emotive content). A good presented in a different frame is a different bundle of goods; therefore the basic axioms of economics are not violated.

Such constructions, while academically interesting, serve little practical purpose in guiding public policy. Their very weakness is their generality; they can explain away *all* consumer behaviour within a parsimonious set of axioms. They are irrefutable and therefore untestable.

Therefore this presentation of biases starts with the assumption that there is no utility from illusion or false comfort. Admittedly this is a disputable assumption for it implies a degree of paternalism. A normative proposition underlying this presentation is that paternalism is justified when it helps, rather than hinders, people from behaving in their best interest, or when their *ex post* outcome is consistent with their *ex ante* expectation. As put by behavioural economists:

To the extent that the errors identified by behavioural research lead people not to behave in their own best interests, paternalism may prove useful.[28]

Not all biases are costly. Some are trivial; some may result in no loss in material welfare, but when biases result in some detriment to consumers it is legitimate to ask if they can be addressed by the instruments of public policy.

A problem of taxonomy

Behavioural economics does not have a clear set of definitions. While conventional economics has a set of well-defined terms to describe phenomena, behavioural economics still lacks a clear set of definitions or a consistent set of classification principles. Conventional economics enjoys the luxury of building a structure from the simplicity of its starting axioms. Behavioural economics starts in the far less tidy observations of the real world, and confronts the problem of trying to infer testable propositions that may help explain observed phenomena.

For example, the tendency for people to over-insure against minor risks, while leaving themselves exposed to other, larger risks, is explained by some by the notion of *pseudocertainty* (a desire to close off certain areas of risk) and by others in terms of *choosing not to choose* (leaving choice to the insurer). Hysteresis in demand functions (inelasticity of demand for repeat-purchase goods already bought, elasticity for new goods) is described in some writings as the *endowment effect* and in others as a *failure to consider opportunity costs* (the former being more a label than an explanation).

The list below makes no claim to be comprehensive; indeed, while it may be possible to describe rational behaviour thoroughly because it is bound by a constraining set of axioms, it is probably impossible to map all behaviour which falls outside those bounds. The biases chosen below are those which are particularly relevant to consumer behaviour, and which were mentioned either explicitly or in passing in the Roundtable discussions.

The biases are covered in many texts and journal articles. Many were first explained in a seminal paper by Tversky and Kahenman in 1974.[29] They added to this set in their writing on "prospect theory",

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28 Camerer, C., Issacharoff, S., Lowenstein G., O'Donoghue, T., Rabin,. M. (2003), "Regulation for Conservatives", *University of Pennsylvania Law Review* Vol 151, p 1212.

29 Tversky, A. and Kahneman, D. (1974). "Judgment under Uncertainty: Heuristics and biases" *Science*, Vol 185.

which covers framing biases (among others, including non-constant search costs), in 1981.[30] Most other biases described below (endowment, sunk costs, mental accounts, money illusion, fairness, binding contracts) are described in a collection of research edited by Kahneman and Tversky and published in 2000.[31] The phenomenon of conjunctive and disjunctive biases is described by Maya Bar-Hillel in 1973.[32] The bias of choice overload (the "jam" experiment) is described in the work of Iyegnar and Lepper published in 2000.[33] The bias of time variant preferences (hyperbolic discounting) is first described by David Liabson in 1997.[34]

Although there are many categories, the most important (and general) set of biases come under the first heading of *framing*. Indeed, many other biases further down the list, such as endowment, "irrational" consideration of sunk costs and mental accounting are sometimes described as framing biases.

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30 Tversky, A. and Kahneman, D. (1981). "The framing of decisions and the psychology of choice" *Science* Vol 211, January 1981.

31 Kahneman, D. and Tversky, A. (2000). (Eds) *Choices, Values and Frames,* Russell Sage Foundation.

32 Bar-Hillel, M. (1973). "On the subjective probability of compound events*". Organizational Behavior and Human Performance,* Vol 35.

33 Iyengar, S. and Lepper, M. (2000). "When choice is demotivating: Can one desire too much of a good thing?" *Journal of Personality and Social Psycholog,y* Vol 79 (6).

34 Laibson, D. (1997) "Golden Eggs and Hyperbolic Discounting" *Quarterly Journal of Economic,s* Vol 112 No 2.

Bias	Consequences – departures from "rational" behaviour.
Framing. There is a set of behaviours which depend on the way in which choices are framed. If options are framed in terms of possible losses, risk aversion tends to dominate; if options are framed in terms of possible gains people are more likely to take up those options.	Choice is influenced by such frames. It is in the seller's interest to present a decision not to buy as the risky decision. The buyer is then less likely to consider the opportunity cost of buying the good.
People's utility curves are concave. The attractiveness of a deal is influenced by where it is perceived to appear on the consumer's utility function.	Suppliers can present choices that are attractive in terms of consumers' concave utility curves. Cashback offers, for example, can be more attractive than a similar or greater discount.
Misconceptions of probabilities. People find it very difficult to estimate probabilities. Some estimates are mathematically and conceptually difficult, obscure to all but those who have studied and use advanced statistical techniques. And people have a general difficulty in understanding the risks associated with very low probabilities. These are not information failures. Even when situations are well-described and objective probabilities are revealed, people do not use that information rationally.	Consumers are likely to over-spend on some insurance and other risk-reducing products. They may purchase insurance products which have very low expected values.
Endowment – also known as the *status quo* bias (Asymmetric elasticity). People are reluctant to sell or give up a good that they already own. By extension, people become psychologically locked into repeat purchases. In part, but only in part, the endowment effect can be described in terms of search and switching costs, but there is a behavioural component which is not explained in such rational terms. (For some classes of repeat purchases, there is evidence of asymmetric behaviour in the opposite direction, when people react negatively to price rises. These biases are better explained under the heading "legitimacy".)	Because of this lock-in consumers do not engage in advantageous trade. Consumers can be attracted to deals such as free trial periods. Even a "guarantee of money back if not satisfied", which in some circumstances is advantageous to consumers, is a practice which aligns with this bias.
Overconfidence, ease of recall, effectiveness of a search set, availability (retrievability of instances), confirmation. These are different biases, but similar in that they all lead consumers to believe their search has been adequate (within the constraints of bounded rationality) when they have tended to overlook other large fields of possibilities.	Consumers restrict their search efforts too early, or overinvest in some fields of search while overlooking others entirely.
Conjunctive and disjunctive biases. People overestimate the probability of conjunctive events while underestimating the probability of disjunctive events.	This applies particularly to risk-reducing or risk-compensating products, such as insurance or safety products. The more elements there are in a sales pitch, the more convincing the story becomes, although logically, the probability of an actual outcome falls when more elements are introduced.

Bias	Consequences – departures from "rational" behaviour.
Anchoring with insufficient adjustment. People's expectation of price does not stray far from anchor points. People make more reliable estimates of reasonable prices when anchor points are absent.	In bargaining situations parties tend to confine their offers and counter-offers to a small range around the first concrete offer or demand.
Default bias The ordering of options, particularly in markets where a choice must be made, influences choice. (This can be seen as an extension of the anchoring bias, and is related to the endowment bias.)	Utilities and providers of compulsory insurance can benefit from this bias by presenting one product as the "default", particularly if this involves no action or only token action by the consumer.
Pseudocertainty People pay a premium to buy out of certain classes of risk, while leaving themselves exposed to higher risks in other areas.	Consumers can be persuaded to buy high cost "first dollar" insurance, rather than taking a rational portfolio approach to risk.
Legitimacy (fairness) People seek fairness in transactions. They are not indifferent to the conditions of supply.	This undermines the assumption of independence of supply and demand functions. People may pay a premium to buy goods made in certain conditions. They may walk away from materially advantageous transactions if they believe they are being treated unfairly.
Non-constant search costs People incur proportionally higher search costs for small purchases than for large ones. (This is linked to the legitimacy bias, in that people believe the higher the price of a good the more acceptable it is for there to be some dispersion around the "fair" price.)	People tend to underinvest in search for major purchases such as cars and houses.
Choice overload – choosing not to choose, decision paralysis. People opt out of search and comparison when overwhelmed with choice. Avoidance of regret takes over from the gain from choosing. People may walk away from markets altogether, may delegate choice to arbitrary mechanisms (toss of a coin), or may delegate choice to other agents – often the seller.	If goods are in inelastic demand (*e.g.* electricity) choice may be determined randomly. If demand is elastic, people may walk away from opportunities, resulting in deadweight loss. People may purchase expensive prepayment schemes to avoid choices (*e.g.* package holidays with no extra charges, leaving choice to the supplier).
Consideration of sunk costs People make decisions based not only on future costs, but also on sunk costs.	People forfeit opportunities based on rational considerations of future costs and benefits. They may hang on to and not replace useless or non-functioning historically expensive but now useless purchases.
Mental accounts People tend to compartmentalize rather than consolidate their incomes and expenditures. For example, people may behave differently towards a dividend or performance bonus than they do to their regular salary.	People are inconsistent in relation to similar outlays which may be classified to different "accounts". Suppliers have an incentive to encourage consumers to see potential purchases in accounts where their demand elasticity is lowest.
Money illusion People tend to consider nominal outlays and receipts rather than inflation or time-adjusted amounts.	This bias can work in the interests of financiers (*e.g.* supply of goods on long-term credit), insurers and refinanciers.

Bias	Consequences – departures from "rational" behaviour.
Time variant preferences – most usually manifest as hyperbolic discounting. People do not have a fixed discount rate to weigh present and future costs and benefits. People's discount rates generally increase the shorter the time period outstanding. This is manifest as myopia, a lack of self-control, and procrastination.	People make decisions about future costs and benefits that are inconsistent with any notion of a firm discount rate. In some cases people incur high upfront costs in exchange for trivial future benefits. In others, people enjoy minor upfront benefits in exchange for high future costs.
Binding self-contracts People enter binding contracts to prevent themselves from exercising choice at a later date. This is in part a reaction to the phenomenon of hyperbolic discounting.	People enter forced saving schemes (*e.g.* Christmas clubs). People choose to lessen the pain of future decisions by reducing the costs of those decisions – *e.g.* paying a large gymnasium club membership up front. In some cases suppliers can benefit from this behaviour by encouraging excessive pre-commitment.

APPENDIX III. WRITTEN PAPERS FROM THREE SPEAKERS

A behavioural perspective on consumer protection

Eldar Shafir, Princeton University

I. Introduction

Policies regarding consumer protection can benefit from a better understanding of consumers. As it stands, policies regarding consumer behaviour and protection (or lack thereof) have been influenced by two popular and rather compelling views of the human agent. The first, "folk psychology" view, consists of our intuitive understanding of the decisions that people make and of the factors that motivate and underlie them. The second, normative, "rational agent model," presents a more analytic, *a priori*, analysis of what it means to make rational choices, and has come to dominate much of economics and the social sciences, as well as the formulation and conduct of policy. Of course, part of what has made the normative treatment so appealing has been its general affinity with intuition. Putting aside certain technical requirements, the normative theory basically assumes that preferences respect simple rules of stability and well-ordering that most naïve respondents, upon a moment's reflection, readily endorse. Conversely, people's intuitions regarding value maximisation, planning, social influence, and the stability and reliability of preferences are, to a first approximation, aligned with normative expectations, even if intuitively people recognise certain normative assumptions as extreme. The empirical findings regarding consumers' decisions, on the other hand, are often non-normative and counterintuitive. Not only are decisions often inconsistent with the normative requirements, they violate simple intuitive expectations as well. And observations that are unexpected and counterintuitive, it is suggested, can yield a better understanding, new insights, and improved policy solutions, the aim of the comments that follow.

II. Decisional conflict and its discontents

People's preferences are typically constructed, not merely revealed, during the decision making process, and the construction of preferences is influenced by the nature and the context of decision. A good illustration is the role of decisional conflict and its implications for the proliferation of alternatives.

The classical normative view of decision making does not anticipate nor has much use for decisional conflict. Each option, according to this view, is assigned a subjective value, or "utility," and the person then proceeds to choose the option assigned the highest utility. Influenced by this compelling account, it is universally assumed that offering more alternatives is a good thing, since the more options there are, the more likely is the consumer to find one that satisfies his/her utility function.

In contrast, since preferences tend to be constructed in the context of decision, choices can be hard to make. People often look for a good reason, a compelling rationale, for choosing one option over another. At times, compelling rationales are easy to articulate, whereas at other times no easy rationale presents itself, rendering the conflict between options hard to resolve. Such conflict can be aversive and can lead people to postpone the decision or to select a "default" option. The proclivity to subdue decisional conflict,

rather than to maximise utility, can generate preference patterns that are fundamentally different from those predicted by normative accounts based on value maximisation.

For example, decisional conflict can lead to a greater tendency to search for alternatives when better options are available but the decision is harder than when relatively inferior options are present and the decision is easy (Tversky & Shafir 1992). A proliferation of alternatives, rather than a plus, may prove confusing or even menacing, and may dissuade consumers from making what may otherwise amount to a favourable choice. In particular, as choices become difficult, consumers naturally tend to defer decisions, often indefinitely (Iyengar & Lepper, 2000; Shafir, Simonson, and Tversky, 1993; Tversky & Shafir, 1992). In one study, for example, expert physicians had to decide about medication for a patient with osteoarthritis. These physicians were more likely to decline prescribing a new medication when they had to choose between two new medications than when only one new medication was available (Redelmeier and Shafir, 1995). Apparently, the difficulty in deciding between the two medications led some physicians to recommend not starting either. A similar pattern was documented with shoppers in an upscale grocery store, where tasting booths offered the opportunity to taste 6 different jams in one condition, or any of 24 jams in the second. Of those who stopped to taste, 30% proceeded to purchase a jam in the 6-jams condition, whereas only 3% purchased a jam in the 24-jam condition (Iyengar and Lepper, 2000).

In a related manipulation that was part of a larger study discussed further below, Bertrand, Karlan, Mullainathan, Shafir, & Zinman (2005) conducted a field experiment in South Africa to assess the relative importance of various subtle psychological manipulations in the decision to take-up a loan offer from a local lender. Clients were sent letters offering large, short-term loans at randomly assigned interest rates. Various psychological features on the offer letter were also independently randomised, one of which was the number of sample loans displayed: the offer letters displayed either one example of a loan size and term, along with respective monthly repayments, or it displayed four examples of loan sizes and terms, with their respective monthly repayments. In contrast with standard economic prediction and in line with conflict-based predictions, higher take-up was observed under the one-example description than under the multiple-example version. The magnitude of this effect was large: the simple (one example) description of the offer had the same positive effect on take-up as dropping the monthly interest on these loans by more than 2 percentage points. In a related finding, Iyengar, Jiang, and Huberman (2004) show that employees' participation in 401(k) (retirement savings) plans drop as the number of fund options proposed by their employer increases.

Adherence to the default or *status quo* has also been observed in naturally occurring "experiments." One was in the context of insurance decisions, when New Jersey and Pennsylvania both introduced the option of a limited right to sue, entitling automobile drivers to lower insurance rates. The two states differed in what was offered as the default option: New Jersey motorists needed to acquire the full right to sue (transaction costs were minimal: a signature), whereas in Pennsylvania, the full right to sue was the default, which could then be forfeited in favour of the limited alternative. Whereas only about 20% of New Jersey drivers chose to acquire the full right to sue, approximately 75% of Pennsylvania drivers chose to retain it. The difference in adoption rates had financial repercussions estimated at nearly USD 200 million (Johnson, Hershey, Meszaros, & Kunreuther, 1993). A second naturally occurring "experiment" was recently observed in Europeans' decisions regarding being potential organ donors (Johnson & Goldstein, 2003). In some European nations drivers are by default organ donors unless they elect not to be, whereas in other, comparable European nations they are, by default, not donors unless they choose to be. Observed rates of organ donors are almost 98% in the former nations and about 15% in the latter, a remarkable difference given the low transaction costs and the significance of the decision.

Whereas the addition of options can generate conflict and increase the tendency to refrain from choosing, certain options can occasionally lower conflict and increase the likelihood of making a particular choice. *Asymmetric dominance* refers to the fact that in a choice between options A and B, a third option,

A', can be added that is clearly inferior to A (but not to B), thereby increasing the choice likelihood of A (Huber, Payne, & Puto, 1982). For example, a choice between USD 6 and an elegant pen presents some conflict for participants. But when a less attractive pen is added to the choice set, the superior pen clearly dominates the inferior pen, thus providing a rationale for choosing the elegant alternative, and increasing the percentage of those choosing the elegant pen over the cash. Along related lines, a *compromise effect* has been observed wherein the addition of a third, extreme option makes a previously available option appear as a reasonable compromise, thus increasing its popularity (Simonson, 1989; Simonson & Tversky, 1992).

The persistence of preference reversals of this and other kinds suggests that minor contextual changes can alter what consumers choose, in ways that are unlikely to relate to their ultimate utility. Of course, the fact that consumers are influenced by conflict and context need not imply that choices ought to be taken away, or even constricted. It does suggest, however, that a proliferation of alternatives, which is where many consumer markets are heading, needs to be addressed and handled with care, rather than be seen as an obvious advantage. It also suggests that the choice of a default, rather than a mere formality that can always be changed, needs to be taken thoughtfully, since it acquires a privileged status. In effect, when proliferating options or the *status quo* are inappropriately handled they can lead to substantial decrement in social welfare.

Several other behavioural factors can influence the outcome of consumer decisions in ways that standard analysis is likely to miss. People often are weak at predicting their future tastes or at learning from past experience (Kahneman, 1994), and their choices can be influenced by anticipated regret (Bell 1982), by costs already incurred (Arkes & Blumer 1985, Gourville & Soman 1998), and by effects of ordering and of temporal separation, where high discount rates for future as opposed to present outcomes, can yield dynamically inconsistent preferences (Loewenstein & Elster 1992; Loewenstein & Thaler, 1992). Contrary to standard assumptions, the psychological carriers of value are gains and losses, rather than anticipated final states of wealth, and attitudes towards risk tend to shift from risk aversion in the face of gains to risk seeking for losses (Kahneman & Tversky, 1979). In addition, people are loss averse (the loss associated with giving up a good is substantially greater than the utility associated with obtaining it; Tversky & Kahneman, 1991), which in turn, causes a general reluctance to depart from the *status quo*, because things that need to be renounced loom larger than comparable benefits (Knetsch, 1989, Samuelson & Zeckhauser, 1988). Contrary to standard assumptions of fungibility, people compartmentalise wealth and spending into distinct budget categories, such as savings, rent, and entertainment, and into separate mental accounts, such as current income, assets, and future income (Thaler, 1985; 1992). Typically, people exhibit different degrees of willingness to spend from these accounts, which yields consumption patterns that are overly dependent on current income, with people saving and borrowing (often at a higher interest rate) at the same time (Ausubel, 1991).

What is common to many of these is the very local and context-dependent nature of consumer choices. Standard thinking typically assumes robust preferences, largely impervious to minor contextual nuances. In contrast, people's choices often result from a heavily context-dependent deliberation, with the option chosen not infrequently being the one that would have been foregone had context differed by just a little, and often in rather trivial ways. What this means is that people's choices are often at the mercy of chance forces as well as of conscious manipulation, both of which may be worth protecting against. In what follows, we briefly consider some other facts of human perception and behaviour worth thinking about as one envisions policies with an eye towards consumer protection.

III. Other relevant behavioural facts

Identities

Recent research has highlighted the relevance of identity salience for people's decisions (see, *e.g.*, LeBoeuf & Shafir, 2005, and references therein). People derive their identity in large part from the social groups to which they belong (Turner, 1987). A person may alternate among different identities - she might think of herself primarily as a mother when in the company of her children, but see herself as a professional while at work. The list of possible identities is extensive, with some identities, like "mother," likely to conjure up strikingly different values and ideals from others, such as "CEO".

In one remarkable study, Asian-American women (whose identities, Asian vs. woman, entail conflicting expectations about mathematical ability) scored higher on a maths test after completing a brief survey that evoked their ethnicity than did those who first completed a survey that evoked gender (Shih, Pittinsky, and Ambady, 1999). In fact, identity-salience has been shown to affect various behaviours, including resistance to persuasion (Kelley 1955), reactions to advertisements (Forehand, Deshpandé, and Reed, 2002), and the rating of consumer products (Reed 2004), and it thus has implications for consumers' decisions. In one study, college students whose "academic" identity had been made salient were likely to opt for more academic periodicals (*e.g. The Economist*) than were those whose "socialite" identities had been triggered. Similarly, Chinese-American citizens whose American identity was evoked adopted more stereotypically American preferences (*e.g.* for individuality and uniqueness over collectivism and conformity) compared to when their Chinese identities had been triggered (LeBoeuf, 2002; LeBoeuf and Shafir, 2004).

Evoked identities tend to activate concepts and priorities that are associated with particular tastes and values (cf. Bargh *et al*. 1996; Higgins, Rholes, and Jones, 1977). Consequently, preference tends to align with currently salient identities, yielding predictable tension anytime there is a mismatch between the identity that does the choosing and the one likely to do the consuming, as when a parent on a shopping spree invests in professional clothing only to regret not having spent more on the children once back at home.

Similar phenomena may also be observed when stereotypes that involve intellectual and professional ability interfere with consumers' confidence and willingness to engage in various transactions. Adkins and Ozanne (2005) discuss the impact of a low literacy identity on consumers' behaviour, and argue that when low literacy consumers accept the low literacy stigma, they perceive market interactions as more risky, engage in less extended problem solving, limit their social exposure, and experience greater stress. In one study, low SES students performed worse than high SES students when the test was presented as a measure of intellectual ability, but performance was comparable when the test was not seen as pertaining to intellectual measures (Croizet and Claire, 1998).

All of the above suggests possibilities both for consumer protection and for consumer empowerment as policy makers endeavour to incorporate behavioural considerations into regulation, as well as programme design and implementation. For example, when offering options, be they bank accounts, healthy foods, or benefits programmes, intended for lower SES participants, the sheer fact that these are presented as intended towards welfare recipients or the working poor may trigger identities less responsive to the offered programme than if more conducive identities, such as head of family, or working taxpayer, had been used instead.

What is suggested by the behavioural literature is that options available to consumers should be carefully crafted and communicated. Overly complex arrangements, extensive verification procedures, information that is hard to find, language that is at an inappropriate level, are all not just hassles to be

grappled with and overcome, but can actually be significant factors in the eventual renunciation or misuse of otherwise beneficial alternatives. A recent study of American food-stamp applications (by the organisation America's Second Harvest) found dramatic hassle costs. State applications reach up to 36 pages and often include incomprehensible questions. The application process often cues negative identities and can induce guilt and alienation. People are finger-printed (to verify that they are not double-dipping in other locations), they encounter perjury threats, they undergo home visits to verify that they are "really poor," and they are often condescended to. Such treatment is likely to reinforce the alienation and hopelessness that often discourage this population. Such hassle factors may appear negligible in a standard cost–benefit analysis, but they are the kind of barriers whose removal is likely to open channels for improved welfare.

Knowledge and attention

A standard assumption is that consumers are attentive and knowledgeable, and typically able to avail themselves of important information. Instead, there appears to be often a rampant ignorance of options, programme rules, benefits, and opportunities, and not only among the poor or the uneducated. Surveys show that fewer than one-fifth of investors (in stocks, bonds, funds, or other securities) can be considered "financially literate" (Alexander, Jones, and Nigro, 1998), and similar findings describe the understanding shown by pension plan (mostly 401(k)) participants (Schultz, 1995). Indeed, even older beneficiaries often do not know what kind of pension they are set to receive, or what mix of stocks and bonds they are invested in.

Cognitive load, the amount of information attended to, has been shown to affect performance in a great variety of tasks. To the extent that consumers find themselves in situations that are unfamiliar, distracting, tense, or even stigmatizsng (say, applying for a loan), all of which tend to consume cognitive resources, less resources will remain available to process the information that is relevant to the decision at hand. As a result, decisions may become even more dependent on situational cues and irrelevant considerations, as is observed, for example, in research on "low literate" consumers, who purportedly experience difficulties with effort versus accuracy trade-offs, show overdependence on peripheral cues in product advertising and packaging, and show systematic withdrawal from market interactions (Adkins and Ozanne, 2005, and references therein.)

Automaticity and priming

A variety of priming effects and automatic processes further contribute to consumer decisions often being malleable and disconnected from eventual consumption. At one extreme, are phenomena such as mere exposure, where mere repeated exposure to objects, say, through publicity, even subliminally, can increase their liking (Bornstein, 1989; Zajonc, 1968). Then there is priming, wherein certain attributes are made to play a greater role in a person's decisions. In a classic priming study, participants took a test involving "word perception," in which either creativity, reliability, or a neutral topic was primed. Participants then completed an ostensibly unrelated "product impression" survey that gauged their opinions of various cameras. Cameras advertised for their creative potential were rated more attractive by those primed for creativity than by those exposed to words related to reliability or a neutral topic (Bettman and Sujan, 1987). Priming can thus influence preferences by making dimensions salient that would otherwise have been considered less important. Because of the transitory nature of priming effects, consumption is often likely to occur long after such criterion salience has dissipated, leaving consumers in different states of mind during product consumption as compared to acquisition (see Mandel and Johnson, 2002; Verplanken and Holland, 2002).

Automatic and imperceptible reactions can also influence decisions so that, for example, diners lightly touched on the shoulder by their waitress tip more than those who were not touched (Crusco & Wetzel,

1984; Schwarz, 1990, Schwarz and Clore, 1983.) In the aforementioned field experiment conducted in South Africa, intended to assess the relative importance of subtle psychological features compared to price in the decision to take-up a loan (Bertrand, Karlan, Mullainathan, Shafir, and Zinman, 2005), some 57 000 incumbent clients of a lender were sent letters offering large, short-term loans at randomly chosen interest rates. Consistent with standard economics, those offered higher rates were less likely to take up a loan then those with access to lower rates. In addition, various "psychological" features on the offer letter, which did not affect offer terms or economic content, were also independently randomized. Among them was the presence or absence of a smiling woman's picture in the bottom corner of the offer letters. For the men in the sample, the presence of that picture had the same positive effect on take-up as dropping the monthly interest on the loans by 4.5 percentage points!

Even when presented with hypothetical questions, respondents are unable to prevent biasing effects on their behaviour, particularly when the questions appear relevant (Fitzsimons and Shiv, 2001). Thus, gauging attitudes toward consumer products can increase attitude accessibility and impact consumer behaviour (Chapman, 2001; Fazio, Powell, and Williams, 1989). For example, Morwitz, Johnson, and Schmittlein (1993) found that merely asking consumers whether they intended to purchase an automobile or a personal computer increased their subsequent purchase rate. Follow-up interviews suggest that the effects of hypothetical questions on choice occur beyond awareness and, as a result, are quite difficult to counteract.

A rich and fascinating literature documents the many ways that mere exposure, simple priming, subliminal perception, and unconscious inferences alter judgment and choice. It is not clear, of course, that all this can be "stopped." But serious awareness of these effects, contrary to the impression that people are fully in control of their exposure and choices, is likely to help create contexts that are more respectful of the true nature of human – as opposed to "rational" – consumers.

IV. Two truisms about behaviour

Two basic behavioural insights are at the core of why consumers' decisions so systematically diverge from those envisioned by standard assumptions. The first is "construal," the notion that decision situations need to be represented, or construed, by the decision maker, and the other is the "power of the situation," the fact that such construal is heavily impacted by the context of decision.

A truism about behaviour is that people do not respond directly to objective conditions; rather, stimuli are mentally construed, interpreted, and understood (or misunderstood). Decisions are directed not towards objective states of the world but towards our mental representations of those states. And these representations do not bear a one-to-one relationship to states they represent, nor do they necessarily constitute faithful renditions of those states. As a result, many otherwise well-intentioned interventions can fail because of the way in which they are construed by the targeted group. For example, people who are rewarded for an activity that they would otherwise have found interesting and enjoyable may come to (mis)attribute their interest to the reward and, consequently, view the activity as less attractive. Children who were offered a "good player award" to play with magic markers – which they previously enjoyed in the absence of any extrinsic incentive – subsequently showed little interest in the markers when these were introduced as an optional activity (in contrast with children who had not received an award and maintained their interest; Lepper, Greene, and Nisbett, 1973).) Critical for the success and effectiveness of policy interventions is the need to devise contexts in ways that do not merely provide the appropriate options and convey the correct information, but that also trigger the construal most likely to generate the intended interpretation and response.

A second truism about human behaviour is that it is a function of both the person and the situation. One of the fundamental lessons of behavioural research is the great power that the situation exerts relative

to the presumed influence of personality traits, along with a persistent tendency to underestimate that power. Consider, for example, the now-classic Milgram obedience studies, where people proved willing to administer what they believed to be grave levels of electric shock to innocent subjects (Milgram, 1974), or Darley and Batson's (1973) Good Samaritan study, which recruited students of a Theological Seminary to deliver a practice sermon on the parable of the Good Samaritan. While half the seminarians were ahead of schedule, others were led to believe they were running late. On their way to give the talk, all participants passed an ostensibly injured man slumped groaning in a doorway. The majority of those with time to spare stopped to help, whereas among those who were running late a mere 10% stopped, the remaining 90% simply stepping over the victim and rushing along. Despite years of ethical training and continued contemplation of life's lofty goals, the contextual nuance of a minor time constraint proved decisive to these seminarians' decision to stop to help a suffering man.

As it turns out, the pressures exerted by seemingly trivial situational factors can pose restraining forces hard to overcome, or can create inducing forces that can be harnessed to great effect. In contrast with massive interventions that often prove ineffectual, seemingly minor situational changes can have a large impact. Kurt Lewin, who coined the term "channel factors," (Lewin, 1951) suggested that certain behaviours can be facilitated by the opening up of a channel, whereas other behaviours can be blocked by the closing of a channel. An example of a channel factor was documented by Leventhal, Singer, and Jones (1965), whose subjects received persuasive communications about the risks of tetanus and the value of inoculation, and asked to go to the campus infirmary for a tetanus shot. Follow-up surveys showed that the communication was effective in changing beliefs and attitudes. Nonetheless, only 3% actually took the step of getting themselves inoculated, compared with 28% of those who received the same communication but, in addition, were given a map of the campus with the infirmary circled, and urged to decide on a particular time and route to get them there. Related findings have been reported in the utilisation of public health services, where a variety of attitudinal and individual differences rarely predict who will show up at the clinic, whereas the mere distance of individuals from the clinic proves a strong predictor (Van Dort & Moos, 1976). Along these lines, Koehler and Poon (2005) argue that people's predictions of their future behaviour overweight the strength of their current intentions, and underweight situational or contextual factors that influence the likelihood that those intentions will translate into action. This can generate systematically misguided plans among consumers, who, reassured by their good intentions, proceed to put themselves in situations which are powerful enough to make them act and choose otherwise.

V. Concluding remarks

Much more can be said about human decision behaviour than can be summarised here. And much of it has direct consequences for what we ought to expect from consumers, and the ways in which they might be aided, educated, and protected. Human behaviour is the outcome of a system – the human information processing system – that is rather idiosyncratic and complex. While many of us would endorse the normative economic principles upon reflection, these do not adequately describe the ways in which we, in fact, go about making decisions. As the renowned economist John Maurice Clark said almost 100 yeas ago, "The economist may attempt to ignore psychology, but it is sheer impossibility for him to ignore human nature... If the economist borrows his conception of man from the psychologist, his constructive work may have some chance of remaining purely economic in character. But if he does not, he will not thereby avoid psychology. Rather, he will force himself to make his own, and it will be bad psychology."

As it turns out, because preferences can be malleable, confused, and misguided, consumers can benefit from attention and help. One form in which these may be delivered is through laws and protections against others' unwelcome influences, which may involve familiar methods such as misleading advertising, hidden clauses, pressure tactics, and so on. Another way to help, however, is through clever arrangements against consumers' own weaknesses, including bad planning, myopia, procrastination, overconfidence, forgetfulness, distraction, peer pressure, confusion, susceptibility to framing effects,

misguided beliefs, and other such very human characteristics. Much of this can be attained through intelligent and informed design of decision contexts that provide the right channel factors, induce desirable behaviours, restrain less constructive tendencies, and thus ameliorate decision-making. Examples of such contexts can be found: seatbelt laws provide a simple safety default that is habitual and unquestioned; being a willing organ donor as a default for drivers who do not elect to opt out creates a context substantially superior to that generated by an opt-in arrangement; per-unit pricing allows comparisons that most people would not conduct intuitively; and direct deposits are an excellent method to save by circumventing the mental accounting that allows one freely to spend cash found in one's pocket. Standard restraints on one's premature access to or control over retirement savings are another example, whereas the attempt to limit such restraints (currently under way in the United States) is an example of the failure to appreciate human fallibility and its potentially dire consequences.

As it turns out, a behaviourally informed perspective has implications for what ought to count as ethical, and perhaps as legal. According to the standard view, people are well informed and in control. Enticements that are better avoided, if harmful enough, will be avoided. Information that is hard to find or to understand, if deemed important enough, will be deciphered. Instead, behavioural research provides ample illustration that even minor and detectable temptations and difficulties are not easy to overcome and can become decisive obstacles. (For more on this, see Bertrand, Mullainathan, and Shafir, 2006.)

Consider the credit cards market, which has benefited from deregulation coupled with technology enabling the almost real-time tracking of personal financial information. A recent report by FRONTLINE® and *The New York Times* documents some of the techniques used by the credit card industry to get consumers to take on more debt. Revenues come from tactics that include hidden default terms, penalty fees and higher rates that can be triggered by just a single lapse - a payment that arrives even hours late, a charge that exceeds the credit line by a few dollars, or a loan from a separate creditor (such as a car dealer) which renders the cardholder "overextended." "[Banks are] raising interest rates, adding new fees, making the due date for your payment a holiday or a Sunday on the hopes that maybe you'll trip up and get a payment in late." The average American family now owes roughly USD 8,000 on its credit cards. Of course, the flurry of unexpected fees and rate hikes often comes just when consumers can least afford them,

Such tactics, of course, are not limited to the credit card industry. Many bank fees, according to *Consumer Reports*, are "no-see-ums embedded in fine print or collected so seamlessly that consumers don't realize they've paid them until long after the fact". Application and re-certification forms can be extremely unfriendly and complicated. As reported by ACORN (Association of Community Organizations for Reform Now), "Much of the competition between lenders in the subprime industry is not based on the rates or terms offered by the different lenders, but on which lender can reach and "hook" the borrower first. Predatory lenders employ a sophisticated combination of "high tech" and "high touch" methods."

Of course, regulating such markets is a non-trivial proposition. On the other hand, where human frailty is recognised, such regulation is attainable. Consider, for example, the Federal Trade Commission's Funeral Rule, which lists a number of procedures every funeral home must follow, and services it must explicitly describe and provide. "When a loved one dies," explains the "Consumer Rights under the Funeral Rule" brochure, "grieving family members and friends often are confronted with dozens of decisions about the funeral – all of which must be made quickly and often under great emotional duress."

Systematic human frailty, as it turns out, is exhibited not only when loved ones die. Recognition of such everyday frailty suggests we ought seriously to consider ways to attain a healthy balance between libertarianism and paternalism (Susnstein and Thaler, 2003), or between free market competition and consumer protection (see, *e.g.*, Gans, 2005; Sylvan, 2004). A better understanding of consumers' strengths and limitations may bring about healthier consumers in more sustainable environments.

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Insights into consumer risk: Building blocks for consumer protection policy

Rhonda Smith and Stephen King*

Section 1: Introduction

While modern competition policy and law are well grounded in economic theory, it is not clear that the same can be said of consumer protection policy. For much of the twentieth century, economic consumer theory paid scant regard to issues of consumer risk, while laws governing consumer protection had foundations based more on notions of fairness than economic efficiency.[35] Yet, to develop an effective consumer protection policy requires an understanding of the circumstances in which consumers are at risk when participating in the marketplace. This necessarily requires an understanding of the economic principles that underpin consumer risk and the likelihood that this will result in consumer detriment.

Classical economics tended to equate consumer risk with issues of firms abusing their market power and charging 'excessive' prices. Modern economic theories of consumer protection generally developed as 'by-products' of attempts to analyse advanced issues of market failure. Thus, problems arising due to information asymmetries were first explored to explain behaviour arising, for example, in medical markets.[36] Consumer search costs were added to standard market models to explain why firms selling otherwise homogeneous goods could charge different prices.[37] Issues of imperfect contracts and transactions costs were first used to explain the boundaries of the firm.[38] This 'by-product' approach has led to a range of essentially *ad hoc* explanations for consumer protection intervention by governments.

More recently, behavioural economics has cast light on deviations between actual and predicted consumer behaviour. Economists have long recognised that consumers may systematically deviate from the predictions of standard economic theory.[39] However, behavioural economic research is now allowing

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35 As a simple example, the more-than-four-thousand-page New Palgrave dictionary of Economics (MacMillan, London, 1987) has an entry for Antitrust policy but no entry for either consumer protection or consumer risk.

36 Arrow, K.J. (1963), "Uncertainty and the Welfare Economics of Medical Care," *American Economic Review*, 53, pp.941-973.

37 Salop, S. and J. Stiglitz (1977), "Bargains and Ripoffs: A Model of Monopolistically Competitive Price Dispersions," *Review of Economic Studies*.

38 Williamson, O.E. (1987), The Economic Institutions of Capitalism, New York: Free Press.

39 For example, the Allais paradox and the Ellsberg paradox have been used to show the limitations of standard expected utility theory in economic decision making under uncertainty since the 1960s. See Mas-Colell, A., M. Whinston and J. Green (1995), Microeconomic Theory, OUP, Oxford chapter 6.

economists to consider these deviations in a more rigorous way. At the same time, behavioural economics is in its infancy and does not offer a complete and cogent theory of consumer behaviour that can be used either to complement or modify traditional theories of consumer choice.

Before reviewing the relevant research, it is worth considering what economists mean by consumer protection problems or consumer risk. Averitt and Lande (1997) identify consumer problems or risk as arising when consumer sovereignty is impeded or impaired.[40] Consumer sovereignty requires that the market offers a range of options to consumers, and that consumers are able to formulate preferences and choose effectively between the options available.[41] Consumer choice is the distinguishing feature of consumer sovereignty, whilst consumer sovereignty is a necessary condition for markets to function effectively and so offer that choice.[42]

However, to define consumer protection issues as being synonymous with impediments to consumer sovereignty raises problems when considering consumer protection policy. It lacks specificity. Under the Averitt and Lande approach market failure is the source of consumer risk because it impinges on consumer choice. Some market failures do result in what is generally accepted as a consumer protection problem, but others, such as externalities, while they may result in distortions that cause sub-optimal choices by consumers, generally would not be viewed as giving rise to a consumer protection issue. For example, responding to the opportunity for cost-saving associated with an externality, producers may react in a way that harms consumers by limiting choice (for example by reducing the amenity value of the environment through pollution). However, correction of the externality would normally be addressed not by consumer protection provisions but by some other policy, such as environmental policy, that is, the policy intervention occurs before producer response to the market failure puts consumers at risk.

Further, the Averitt and Lande approach is embedded in standard neoclassical consumer theory and is difficult to reconcile with some of the findings of behavioural economics. For example, when considering consumer protection, many economists would agree that there are circumstances where (at least some) consumers need protection from themselves (or in the case of children, for example, from the decisions of their carers). In other words, there are situations where consumers' choices may need to be over-ruled, either in their own interests or in the interests of society. Behavioural economic research is expanding our understanding of the limitations of consumer choice. However, equating consumer risk with a limitation on consumer sovereignty provides little scope for analysis of consumer protection problems that arise due to the failure of choice.

Debating whether consumer risk is due to limitations on preferences, distortions of preferences such as through advertising, or due to either market-based or cognitive limitations in transforming choice to effective action, however, misses the point. From a policy perspective, the issues are:

1. Does there exist a situation or group of situations that involve a well-defined consumer risk, albeit that the underlying nature of that risk may be debated.

2. Can a sensible policy be developed to address that risk regardless of the exact underlying cause or is understanding the underlying cause necessary to solve the consumer risk problem?

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40 Averitt, Neil W. and Robert H. Lande (1997), "Consumer Sovereignty: A Unified Theory of Antitrust and Consumer Protection Law", Antitrust Law Journal, Vol 65, p 713-756, at pp. 713-714.

41 Averitt and Lande, p. 713.

42 Waterson, Michael (2001), "The Role of Consumers in Competition and Competition Policy", Warwick Economic Research Papers, No. 607, Dept of Economics, University of Warwick, p.2.

Put simply, can we use existing theories of consumer choice to develop consistent consumer protection policies that are robust? The aim of this paper is to consider whether such robust policy development in consumer protection is possible currently. Section 2 of the paper provides a brief overview of the potential for consumer risk and detriment from the perspective of neo-classical economics and contrasts this with the perspective provided by behavioural economics. In Section 3 the implications for policy of each of these approaches is outlined, together with the conditions necessary to justify policy intervention. Then in the following Section we provide a preliminary stocktake of how the developments in both neoclassical economic theory and behavioural economics jointly contribute to consumer protection policy.[43] We address the lessons that policy makers should take from these developments in economics and how our evolving understanding of consumer risk should feed into consumer policy. Some concluding remarks follow.

Section 2: Sources of consumer risk

Standard economic theory treats consumers at two different levels. First, classical demand analysis summarises relevant consumer behaviour in terms of a demand function. This function relates the total quantity of a good or service that consumers are willing to buy to a number of variables that, from the consumers' perspective, are treated as exogenous. Most notably, consumers take the price of the relevant good or service, the prices of other products, their income and their own tastes as fixed and given. Classical demand analysis is a tool to assist policy makers to understand markets and to inform decision-making by firms. It provides little useful input into an analysis of consumer decision-making, and consumer risk and detriment because it assumes away almost all consumer behaviour that might be of interest.

Second, classical choice theory considers how consumer behaviour can be mathematically summarised. In particular, if a consumer's decisions systematically satisfy certain axioms of choice, then those choices can be summarised by a utility function and the consumer's choices will behave 'as if' the consumer was choosing in order to maximise the value of this utility function. The standard axioms include completeness and transitivity.

Classical choice theory, while connected to demand analysis, is focussed on the individual and, as such, potentially provides a more useful foundation for analysis of consumer protection issues than demand analysis. However, it is limited in its ability to analyse consumer risk. Choice theory assumes that, when faced with a choice problem, the consumer has well defined 'preference ordering'. Thus the consumer's preferences are assumed to be distinct and independent of the choice problem facing the consumer. The axiom of completeness means that the consumer's preference ordering can be well defined for any possible choice available to the consumer. The consumer is never 'in doubt' about his or her preferences. The axiom of transitivity requires consistent choices: The consumer cannot make mistakes or, in the absence of improved information, change his or her mind.

However, an important element when considering consumer risk and hence policy associated with this, is an understanding of how and under what circumstances consumer preferences are formed. A wide variety of factors may be relevant, including functional needs, advertising, cultural factors, and peer pressure, as well as specific factors at the time of purchase.

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43 While we will often refer to a specific policy as 'regulation' it needs to be recognised that, in the context of consumer protection, this term encompasses a wide range of interventions including government advertising campaigns to inform consumers, voluntary codes of conduct that can be adopted by industry participants, limits on particular activities by market participants such as advertising restrictions, small changes to contract terms and conditions such as requiring a 'cooling off period', and explicit bans on certain behaviour such as misleading conduct.

To see the limitations of classical choice theory for understanding consumer risk and potential consumer detriment, consider advertising. Under the classical choice approach, advertising is either irrelevant or has the role of informing the consumer. But it is assumed that advertising cannot systematically distort a consumer's preferences in a way that could be harmful to that consumer. Such a benign view of advertising, however, seems to fly in the face of actual business behaviour and existing policies that limit advertising. Producers, in their own interests, engage, for example, in advertising, brand proliferation and continuously changing models/fashions. The aim of much of this behaviour appears to be to influence consumers' preferences. Thus, in order to analyse the effect of advertising on consumer risk we need to understand whether advertising influences consumer preferences, and, if so, how it influences these preferences and whether it this is likely to be harmful to consumers.

Similarly, the completeness axiom means that a consumer can never face too much choice. Indeed, it is easily shown under classical choice theory that restricting choice will either be benign or harmful from the perspective of consumers (the implicit assumption made by Averitt and Lande, for example). It can never be beneficial. Again, however, real world experience seems to counter this conclusion. For some products consumers seem to face a dizzying array of prices and options, which appear to confuse many and by not exercising the option to choose, may limit competition.[44]

Reliance of neoclassical economics on classical choice theory does not mean that it is unable to deal with consumer protection issues. Rather, it means that these issues will be approached from a particular perspective. This perspective may not always be appropriate. Indeed, the neoclassical economic approach will be limited whenever the underlying assumptions of choice theory are violated.

Neo-classical economics attributes consumer risk to market failures. The simplest market failure is a lack of competition in supply. Prices above competitive levels result in suboptimal consumption and cause consumers to purchase less preferred products. More recently, neoclassical economics has recognised the role of information in creating market failures that lead to consumer risk. This approach recognises that information may not be available or, where it is available, it may not be costless and its value is likely to vary according to the circumstances under which it is acquired. Thus, the 'lemons' problem, first identified by Akerlof (1970), occurs because consumers lack the information to distinguish 'high quality' products from 'low quality' products *and* sellers of low quality products have individual incentives not to provide this information but to state that their products are high quality.[45] As a consequence, consumer detriment may result because consumers typically under-value the product and so under-consume it. It is not unusual for private information to exist only on one side of a market even though it is relevant to product valuation, and hence decision making on the other side of the market.[46] Cost cutting made possible by using poorer quality inputs or 'cutting corners' for example in the design process, or false claims about product attributes such as how and where they were produced, are made possible by incomplete and/or asymmetric buyer information.

In other cases, consumers may make inappropriate choices because the costs of acquiring information and/or using it are too great relative to the expected benefit. This will be influenced by the expected degree of price disparity in the potential search area and the opportunity cost of time. As an example, consumers

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44 For example, Wilson, C. and C. Waddams-Price (2005), 'Irrationality in Consumer's Switching Decisions: When More Firms May Mean Less Benefit', CCP Working Paper 05-04, ESRC Centre for Competition Policy, University of East Anglia.

45 Akerlof, G. (1970) 'The Market for 'Lemons': Quality Uncertainty and the Market Mechanism', *Quarterly Journal of Economics*, vol 84, 488-500.

46 Buyers, as well as sellers may also possess information relevant to the transaction that they have no incentive to disclose, as for example when seeking health insurance.

may randomly and infrequently face high-stress at the time when they must make purchase decisions.[47] The cost to the consumer of gaining additional information or engaging in extra search at these times may be abnormally high. As a consequence, the benefit from search may be heavily discounted and search severely limited or non-existent. For example, someone involved in an automobile accident suddenly requires the services of a tow truck. The person must reach a quick decision in the absence of any market research and under emotional stress. As a result, individual tow truck drivers have a strong incentive to have consumers enter into arrangements that would not normally be acceptable to them, thereby distorting consumer choice. In addition, inappropriate purchase decisions may result because testing the qualities of a product, such as flammability or breaking strength, may involve destroying it. As a consequence individual consumers are unlikely to undertake such tests. Alternatively, if the information obtained is complex and does not lend itself to comparison, either intrinsically or because suppliers make it so, it is of little value to the consumer.

In summary, because of their foundations in classical choice theory, neoclassical economic models of consumer risk naturally tend to focus on issues of imperfect information, search costs and transaction costs, moral hazard, adverse selection, signalling, information externalities, incomplete contracting and related behaviour. Thus, neo classical economics explains at least some of the apparently irrational consumer behaviour identified by behavioural economics (see below) as the consequence of information deficiencies, transactions costs and contracting limitations.

Recent developments in behavioural and experimental economics show that, in certain circumstances, consumers appear to violate (and often systematically violate) standard economic assumptions about rational behaviour.[48] Thus,

> '…in many domains, people lack clear, stable, or well-ordered preferences. What they choose is strongly influenced by details of the context in which they make their choice, for example default rules, framing effects (that is, the wording of possible options), and starting points. These contextual influences render the very meaning of the term "preferences" unclear.'[49]

Bowles summarises the basic assumptions concerning consumer preferences and decision-making of behavioural economics as follows. 'First, many behaviours are best explained by what are termed *social preferences:* in choosing to act, individuals commonly take account not only of the consequences of their actions for themselves but for others as well. Moreover, they often care not only about consequences but also about the intentions of other actors.'[50] Second, 'individuals have limited capacity and predisposition to engage in extraordinarily complex and costly cognitive exercises.'[51] As a consequence, often they apply 'rules of thumb'. Third, behaviour is context-dependent. '…our preferences are *situationally specific and*

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47 Described by Waterson as 'distress purchase', supra, n. 42.

48 Behavioural economics is providing insights into provider behaviour as well. For example, see Cain, Daylian M., George Lowestein and Don A. Moore (2005), "The Dirt on Coming Clean: Perverse Effects of Disclosing Conflicts of Interest", *Journal of Legal Studies*, Vol 34, January, pp 1-25, show that provider behaviour may systematically diverge from the rational choice model and this has significant policy implications.

49 Sunstein, Cass R. and Richard H. Thaler (2003), "Libertarian Paternalism Is Not An Oxymoron", The University of Chicago Law Review, Vol. 70, Fall, pp1159-1202, at p.1161.

50 Samuel Bowles (2003), Microeconomics: Behavior, Institutions, and Evolution, Princerton University Press, New York, p.96.

51 Bowles, p.97.

endogeneous.'[52] Options tend to be evaluated from the current state of the decision maker (or at least the experience of the decision-maker's reference group).

Thus, while neoclassical economics assumes that consumer preferences and decisions can be treated as if consumers maximise their individual utility, behavioural economics recognises that consumers may be motivated by perceptions of fairness and concern about consequences for others. In this sense, decision making is based on information that is ignored in neoclassical economics. Nevertheless, behavioural economics also highlights that in some circumstances, consumers may have access to information but deliberately limit their use of that information or they may ignore it completely, creating consumer risk and potential consumer detriment. As a consequence, they may make decisions that, given the information available to them, appear to display '…overconfidence, optimism, anchoring, extrapolation and making judgements of frequency or likelihood based on salience (the availability heuristic) or similarity (the representativeness heuristic).' [53] Finally, neoclassical economics assumes that context plays no part in shaping consumer decisions (the assumption of transitivity). Yet, framing effects, where the individuals' choice depends on the specific way that the options are presented to them, are well known in cognitive psychology. For example, Tversky and Kahneman showed how individuals' choice over medical treatment policy differed depending on whether it was presented in a way that focussed on the probability of survival or the probability of death.[54]

For the present purpose, the significance of such conduct is whether it results in consumer choice that does not accord with *ex ante* consumer preferences, possibly because it creates an opportunity for suppliers to shape consumer preferences or otherwise take advantage of them for their own benefit.

To illustrate, consider the creation of competition and hence consumer choice in energy retailing. Empirical studies in the United States[55] and in Britain[56] indicate that while industrial and commercial users have responded to this change, residential customers have not, despite the opportunity for significant cost savings. The neoclassical model may explain this in terms of the search costs relative to expected benefits, switching costs and transaction costs, while behavioural economics may explain it as the result of inertia, incapacity to process the complex information required to make the decision to switch or faced with choice, the fear of making the wrong choice. However, the potential for competition does not necessarily reduce exploitation of consumer irrationality or ignorance. As observed by Wilson and Waddams-Price (2005), more choice may make consumers worse off because more choices mean more risk of error and hence switching is deterred.[57] The result may be that in equilibrium, all suppliers charge the monopoly price because a firm will not lose many customers by charging a price slightly higher than other firms. To facilitate this, a market participant may deter search and switching by providing pricing and other relevant

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52 Ibid.

53 See for example, Richard Thaler (2000), 'From Homo Economicus to Homo Sapiens', *Journal of Economic Perspectives*, Vol 14, No. 1, pp. 133-141, at pp 133-4.

54 Tversky, A. and Kahneman, D. (1981). The framing of decisions and psychology of choice. Science, 211, 453-458.

55 Brennan, Timothy J. (2005), 'Consumer Preference Not to Choose', Discussion Paper, Resources for the Future, www.rff.org, November, pp.7-12.

56 Giulietti, Monica, Catherine Waddams-Price and Michael Waterson (2005), "Consumer Choice and Competition Policy: a study of UK Energy Markets", *Economic Journal*, October, pp. 949-968.

57 Wilson and C. Waddams-Price, supra, pp. 24-26.

supply information in a form that confuses customers and limits comparisons with other suppliers: referred to as confusopoly.[58]

The significance of behavioural economics is that it focuses attention on how consumers make choices, and particularly, on how consumer preferences are formed and the factors that influence them. The more fully this is understood, the better we will be able to identify situations where consumer risk may exist, and hence where there is the potential for consumer detriment. This provides a basis for determining whether a policy response is justified and if so, the appropriate form of that response.

Section 3: Implications for consumer policy

Consumer protection laws aim to deter conduct that has a detrimental impact on consumers. Typically, they do so by prohibiting certain conduct (although product standards require that products satisfy minimum conditions), and by influencing the incentive for suppliers to engage in such conduct. The incentive for a supplier to engage in conduct that is likely to result in consumer detriment depends on the expected additional profits derived from the conduct, the probability of being apprehended and found to be in breach of the relevant legislative provisions, the level of penalties imposed following such a finding relative to the additional profit and the likely damage to the firm's reputation. In most jurisdictions the probability of apprehension and subsequent conviction is relatively low and in many cases the penalties are low relative to the expected rewards. In some cases other provisions, such as codes of conduct, support the legislative regime. Yet when consumers are damaged by prohibited conduct, often they find it difficult, costly and/or time-consuming to gain compensation.[59]

In our view, two propositions should underpin policy development. The first is that intervention is justified only when the market is unlikely to respond in a manner that adequately addresses the issue within an appropriate timeframe. Second, even if the market is unlikely to eliminate or reduce the problem, intervention is warranted only if the resulting benefits exceed the costs of intervention. Intervention may not be justified if consumers are aware of the risk, can respond to it relatively easily and at little cost, but fail to do so, as this suggests that consumers view the detriment in the particular circumstances as insignificant. Equally, government intervention to over-ride consumer preferences is justified only if this is likely to result in a net benefit to society. However, as we argue below, these requirements are necessary, but may not be sufficient, conditions for policy intervention. Even if they are superficially satisfied, if views about the likelihood of consumer risk and/or the policy solutions to overcome the risk are not consistent from the neoclassical and behavioural approaches, intervention may not be justified.

The profit motive provides the incentive for suppliers not only to engage in conduct that makes available products that consumers value but, in certain circumstances, to engage in conduct that damages consumers – by raising prices relative to competitive levels or reducing costs by lowering quality/attributes but not prices. To engage in conduct that creates consumer risk and potentially consumer detriment, however, suppliers must have both the incentive *and* the ability to do so. The exception to this may be where producers make mistakes (for example, in relation to pricing claims in advertising) or where the

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58 Adams, Scott (1997), The Dilbert Future, New York: Harper, cited by Joshua Gans (2005), "Real Consumers and Telco Choice: The Road to Confusopoly", paper presented to the Australian Telecommunications Summit, Sydney, November. Peter Diamond (1971) "A model of price adjustment" *Journal of Economic Theory*, 3, 156-168, was the first to formally show how small exogenous search costs could lead to monopoly pricing in otherwise well-functioning markets. The idea behind "confusopoly" is that such search costs may be generated endogenously by firms in the relevant market.

59 Muris, Timothy (1991), 'Economics and Consumer Protection', *Antitrust Law Journal*, Vol 60, No. 1, pp 103 – 121, p. 104.

product is dangerous because it is used in a way that could not reasonably be anticipated, especially in relation to new products.

Neoclassical Policy Prescription

Neoclassical economics attributes consumer risk and the potential for consumer detriment to the existence of market power on the part of suppliers. It is apparent that consumers are at risk when they lack the choice of supplier and hence lack bargaining power, that is, in markets that are not competitive. Consumer risk of this sort is addressed via a vigorous competition policy. Indeed, ensuring competitive markets is often regarded as the most effective form of consumer protection.[60] Competition policy aims to protect or promote competition and, absent market failure, this results in efficient market outcomes that benefit consumers. However, simply increasing competition does not always benefit consumers and, as Sylvan (2004) points out, the two aims – increasing competition and benefiting consumers – may conflict with one another. [61] An obvious example is the creation of competition in industries such as gas, electricity and telephony, and the difficulty faced by users, especially households, in acquiring and processing information in order to access the benefits of competition (see earlier). As a consequence, typically consumers have failed to exercise the choice with which they have been provided and by not exercising that choice markets may become less competitive in future. Similarly, strict liability rules protect consumers from harmful products but new products may have unforeseen consequences, despite extensive pre-release testing and so these rules increase the risk of innovation and lessen the supply of innovation or delay access to new products to the detriment of consumers. The neoclassical emphasis on making good information deficiencies to reduce consumer risk also highlights a potential conflict between the two policies as more information assists consumer decision making but may facilitate collusion on the supply side of a market.[62] Accordingly, competition and consumer protection regulators should consider the likely consequences of their decisions along two interrelated dimensions, namely the effect on consumer outcomes and the effect on competition outcomes.

Even in competitive markets, however, suppliers may possess market power if consumers are not well informed about products, supply conditions and/or alternatives, that is, information deficiencies may result in market failure. While the incentive for suppliers to engage in conduct that creates consumer risk is the expectation of additional profit, in competitive markets usually such conduct is constrained by the risk that consequential lost sales, at least in the longer term, will result in lower profits. However, suppliers may possess significant market power or bargaining power where there are informational deficiencies that are not overcome by relatively frequent purchase. Consequently, the second limb of a successful consumer protection policy from a neoclassical perspective is to provide consumers with more and better information, for example through mandatory disclosure or through third party certification.

Policy prescriptions from behavioural economics

The policy implications of behavioural economics in some respects are more confronting than those derived from the more traditional approach to consumer protection. As outlined in Section 2, behavioural economics predicts that for various reasons some consumers (or consumers in some circumstances) may act in ways that are inconsistent with their *ex ante* preferences. Consumers may use information in ways

[60] Allen Asher (1999), Product Liability: The Regulatory Safe-Guards Provided By Product Liability and Consumer Protection Laws, APEC Seminar on Good Regulatory Practices, Rotorua, New Zealand, August, p3.

[61] Louise Sylvan (2004), "Activating competition: The consumer-competition interface", *Competition and Consumer Law Journal*, Vol. 12, No. 2, pp. 191-206, at p. 192.

[62] Hobbs, Caswell O. (2004-2005), 'Antitrust and Consumer Protection: Exploring The Common Ground', *Antitrust Law Journal*, Vol 72, pp 1153-1166, at p. 1157, footnote 18.

not predicted by neoclassical theory or they may, for various reasons, not use available information. Thus, while in some cases providing more information or providing information in a different form may remove or reduce the risk to consumers, this will not always be the case. For example, Sunstein and Thaler point out that:

> 'Because framing effects are inevitable, it is hopelessly inadequate to say that when people lack relevant information the best response is to provide it. In order to be effective, any effort to inform people must be rooted in an understanding of how people actually think. Presentation makes a great deal of difference: The behavioural consequence of otherwise identical pieces of information depend upon how they are framed.'[63]

Thus, in circumstances where the conduct of suppliers alters the preference set of consumers and hence their choices, resulting in an inferior outcome for those consumers, the solution may lie in regulatory intervention which aims to 'steer people's choices in welfare-promoting directions without eliminating freedom of choice.'[64] However, the diverse range of factors and circumstances likely to place consumers at risk suggests that regulatory intervention is likely to be detailed and conduct-specific.

An important insight provided by behavioural economics is that often only some groups of consumers (or all consumers but only in particular circumstances) are likely to be at risk. This highlights an important policy consideration, namely whether policy initiatives to protect particular groups of consumers (such as undisciplined or unsophisticated consumers) may impose such costs on not-at-risk consumers that aggregate welfare or wellbeing is reduced. To avoid this, cost-benefit analysis could be used to evaluate alternative policy initiatives. Does a policy initiative that can protect the at-risk group of consumers generate sufficient benefits to more than offset any likely costs that will be imposed on other groups in society? If so, then policy intervention is reasonable.

Using a cost-benefit approach involves two important limitations. First, cost-benefit analysis often faces problems of measurement and a high potential for error. If the costs and benefits, either of existing market behaviour or of a proposed policy intervention, cannot be measured accurately then it is difficult to determine whether a policy is socially desirable.

Second, and more importantly, behavioural economics is based on empirical observation. These observations may be consistent with a variety of behavioural explanations. However, this 'theoretical uncertainty' creates difficulties for policy formulation. Economists need to formulate robust policies that apply to individuals and groups who react in the face of a policy change. A consistent understanding of these reactions is important when formulating policies in order to ensure that the intervention improves rather than worsens the outcome for consumers.[65] A 'practical' solution to an observed consumer problem that is not based on an understanding of consumer behaviour and the market reactions to the policy is unlikely to result in a satisfactory outcome. Put simply, a purely empirically-based policy proposal cannot be subject to appropriate cost-benefit analysis.

If standard cost-benefit analysis cannot be used as an appropriate tool for policy evaluation when dealing with a particular consumer risk, one alternative is to adopt a (more conservative) 'do-no-harm'

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63 Sunstein, Cass R. and Richard H. Thaler (2003), "Libertarian Paternalism Is Not An Oxymoron", The University of Chicago Law Review, Vol. 70, Fall, pp1159-1202, at p. 1182.

64 Sunstein and Thaler, p. 1159.

65 This is simply a generalisation of the critique of macroeconomic policy first presented in Robert E. Lucas (1976) "Econometric policy evaluation: a critique", Carnegie-Rochester conference series on public policy, 1, 19-46.

approach to regulation. Under such an approach a policy intervention would be acceptable if it aids those at risk while doing no harm to others.[66]

Section 4: Towards a new approach to consumer policy

Understanding consumer choice and hence consumer risk as an input into policy requires a much better understanding of consumer demand than exists at present. As noted above, neoclassical economics tends to assume away most of the relevant issues that underlie consumer choice because of its focus on the behaviour of firms. Further, because the exercise of consumer choice is necessary to ensure that markets work efficiently and effectively, assuming consumer choice is exogenously determined means that the theory of markets that underpins competition policy is incomplete. This is because, for example, it cannot adequately explain why in certain circumstances consumers fail to exercise the option to switch between suppliers. Behavioural economics, supported by experimental economics, is providing important insights in this area but does not consider, at least in any detail, how firms may respond to this consumer behaviour. However, as yet there is no rigorous theory of consumer demand that combines the insights from neoclassical economics with those from behavioural economics. Consequently, the following is intended to illustrate the possible significance for policy formulation of identifying sources of consumer risk and consumer detriment. It is not intended to provide a comprehensive discussion of particular policies.

The table below represents the policy implications from the interaction between neoclassical economics and behavioural economics. Consider first the prediction of neoclassical economics that particular conduct will create the potential for consumer risk. The left-hand column shows the situation where neoclassical analysis suggests that there is a consumer problem that requires policy intervention. For example, deliberately misleading and deceptive conduct by a seller is clearly a problem under neoclassical economics and even the most conservative economists would agree that legal recourse should be available to consumers who are subject to such behaviour. The right-hand column refers to situations where the neoclassical approach suggests that there is little if any consumer risk problem. For example, the interaction of preference formation and advertising is unlikely to be considered a relevant issue of consumer risk under a neoclassical analysis that takes preferences as exogenously determined.

[66] Camerer, C., S. Issacharoff, G. Lowenstein, T. O'Donoghue and M. Rabin (2003), "Regulation for Conservatives", University of Pennsylvannia Law Review, No. 151, pp. 1211-1254.

		Neoclassical approach	
		Problem	No Problem
Behavioural approach	Problem	Independent solution / Dependent solution	Ambiguous policy conclusion
	No Problem	Ambiguous policy conclusion	No policy concern

The rows consider consumer risk from the perspective of behavioural economics. The top row considers situations where behavioural economics argues that there will be consumer risk. Again, deliberately misleading and deceptive conduct will be a problem under the behavioural paradigm. However, in contrast to most neoclassical economics, issues of advertising and preference distortion may lead to consumer risk from the perspective of behavioural economics and, as such, fall into the top row of the table. The bottom row then considers issues that do not suggest a consumer risk from the behavioural perspective.

Each box in the above matrix represents a potential policy outcome. Clearly if there is no issue of consumer risk under either a neoclassical or a behavioural analysis, then there is no issue of intervention. No policy is required and the market can be left to operate freely. This outcome is represented by the bottom right-hand box. In contrast, both a neoclassical approach and a behavioural approach may suggest an issue of consumer risk. This outcome is represented by the top left-hand box. In this situation, some policy intervention may be desirable. However, while both a neoclassical approach and a behavioural approach suggest there is an issue of consumer risk, this does not mean that the alternative approaches agree on the source of that risk or on the appropriate tools to deal with it. As a result, even though a problem may be identified it may not be possible to design unambiguously a policy solution. However, if a policy solution exists that is independent of the underlying analysis, then that policy can be implemented to address the problem. In this situation, any conflict between the neoclassical and the behavioural approaches is irrelevant as a single policy solution that is appropriate under *either* approach can be devised. This source-independent policy solution is represented by the upper triangle in the top left-hand box.

Unfortunately, a policy solution that is consistent across both the behavioural and neoclassical approaches may not be possible. Indeed policies that address the consumer risk issue under a neoclassical approach may exacerbate the problem based on a behavioural approach and vice-versa. In this situation, a policy recommendation cannot be presented unless the actual nature and source of the consumer problem is

understood. Thus, while analysts can agree that there is a problem, they cannot agree on the solution. This situation is represented by the bottom half of the top left-hand box.

These alternative outcomes can be illustrated by two simple examples. Consider, first, the case of dummy-bidding, say in (English open) house auctions. This practice involves the auctioneer pretending to receive a bid from a party in the crowd even though no bid has been made. The aim is to convince actual bidders that they need to raise their bids to win the auction. From the perspective of neo-classical auction theory, dummy bidding adds 'noise' to the auction. Actual bidders will be unable to tell if they truly face bidding competition or if the auctioneer is trying to induce them to 'bid against themselves'. As a result, buyers will tend to moderate their bids and the efficiency of the auction process is likely to be reduced. This outcome is bad for the seller as well as buyers. The market can be described as 'dysfunctional'.[67] However, no individual seller can 'deviate' and guarantee not to dummy bid because, by its very nature, dummy bidding cannot be detected and such a guarantee would be worthless. Thus, under a neoclassical approach, dummy bidding represents a situation of consumer risk – an outcome in the left-hand column of the above table.

Dummy bidding is also a problem under a behavioural approach. Auctioneers tend to justify dummy bidding as a way to 'excite' the crowd and 'improve' the bidding. Indeed, dummy bidding could be used to create a frenzy of bidding even when there is really little interest in the property. In this sense, dummy bidding is just a 'trick' to change bidder attitudes and behaviour in a way that raises the final sale price. There is a problem of consumer risk – represented by the top row of the table.

While the behavioural and neoclassical explanations as to why dummy bidding is a problem may differ, there are simple policy solutions that can solve both issues. Making dummy bidding illegal and requiring pre-registration of bidders, then enforcing that policy, for example through random checks, can solve the consumer risk issue regardless of which 'explanation' of the problem is correct. So the policy solution is independent of the underlying cause of the problem. In this situation there is a strong argument for policy intervention as indicated by the top triangle in the top left-hand box.

Alternatively, for our second example, consider product information issues. If inadequate information is provided in relation to a complex product or contract, this can create consumer risks under either a behavioural or neoclassical economic approach. Under a neoclassical approach, the solution to such a lack of information is simple: more information should be provided. If there are issues of transactions costs in evaluating information there may be requirements to both provide more information and highlight certain aspects of that information that are critical in relation to consumer concerns. In addition, consumers may be advised to seek outside advice in certain situations. Nevertheless, once the information is provided *caveat emptor* prevails. However, under a behavioural approach, such a solution is likely to worsen the problem. If consumers have limited cognitive abilities, either generally or in a particular situation, then adding more information may result in information overload and hence in worse decision making. Advising consumers to seek outside advice is likely to be ignored in the 'rush' to sign the contract or buy

67 The term 'dysfunctional market' has been used by the OECD Competition Committee and Committee on Consumer Policy to refer to markets that perform sub-optimally. To describe a market as 'dysfunctional' refers to something more than a market that is not operating 'efficiently' due to the exploitation of market power. The OECD considered a number of characteristics that might be indicative of dysfunctional markets, such as infrequently-purchased products, complex products with high consumer search costs, complex products where consumers lack experience, and products where quality claims are not readily observable or testable. These correspond closely with the informational issues identified as a potential source of consumer risk earlier in this paper. See James Rill (2004), Summary of Discussion Points, Business and industry advisory committee to the OECD, joint meeting of the competition committee and the Committee on Consumer Policy on identifying and tackling dysfunctional markets, October 13, www.biac.org/statements/comp/Final-CompConsPolicyDysfunctionalMarketDiscussion.

the product, particularly in the presence of a persuasive sales person. So the neoclassical policy solution is exactly wrong under the behavioural approach.

The policy solution under a behavioural approach is clear. The government can mandate standard form clauses, or even standard form contracts. Rather than requiring that the consumer read ever more complex contracts, this recognises that the consumers probably will not read the contract and establishes a contract by law. Of course, such a solution is highly undesirable from the neoclassical perspective. While removing ambiguity, the behavioural solution also limits consumer choice. Overall, it can make consumers worse off as parties are now constrained to government-devised contracts that are inflexible and cannot be altered to fit their personal circumstances. So the behavioural solution is exactly wrong under the neoclassical paradigm.

This example illustrates a situation where the appropriate policy response to consumer risk is dependent on the underlying cause of that risk. While both behavioural and neoclassical approaches agree that there is a problem of consumer risk, they offer up different, and mutually contradictory, policy responses. This is represented by the lower triangle of the top left-hand box in the table.

When policy solutions are cause-dependent, it is far from clear how the authorities should act. After all, specific intervention may be worse than no intervention. It may be desirable for the authorities to be cautious and to try and devise a policy that at least partially addresses the concern in a way that does not depend on the underlying cause. In other words, to try and find an approach that moves the issue from a dependent solution to an independent solution, even if the approach is only partially satisfactory. Alternatively, the best option may be to do nothing, particularly if *both* the neoclassical and the behavioural approaches are likely to be correct for at least parts of the population, and if the solutions under either approach have strong negative consequences under the other approach.

The final two boxes in the above matrix represent situations where a problem is identified by only one of the two alternative approaches. The top right-hand box represents an outcome where the behavioural approach suggests that there is a problem of consumer risk, but such a problem is not identified under the neoclassical approach.

To see this, consider the issue of high-pressure sales. Under a strict neoclassical approach, high-pressure sales should have little or no effect on consumers. To the extent that sales staff highlight relevant features of a product, such sales staff may be beneficial. At worst their high pressure sales tactics are annoying. It is assumed that consumers rationally analyse their options and make a choice that best suits them. Based on a behavioural approach, however, high-pressure sales may create a problem of consumer risk. Faced with high-pressure sales tactics, consumers may purchase goods or services that they do not want, and/or they may buy earlier than they intended and so do not 'shop around' for a preferable or cheaper alternative. One policy alternative suggested by the behavioural approach is the introduction of 'cooling off periods' for certain sales, including those susceptible to high pressure sales tactics. For example, a customer may have three days to inform the seller that they have changed their mind if they purchase a product, say, from a door-to-door sales person. This allows the individual time to rethink their decision with the pressure removed and as such is likely to mitigate the consumer risk. Even if the behavioural approach is inappropriate, however, a cooling off period is unlikely to do any significant harm to a consumer under a neoclassical approach. The cooling off period will simply be irrelevant. Thus the use of a cooling off period will satisfy both the 'do no harm' rule and cost-benefit testing. It is beneficial under the behavioural approach and benign under a neoclassical approach. This can be contrasted with the alternative policy of banning door-to-door sales. This solution will be undesirable under a neoclassical approach. It limits consumer choice and may harm consumers who are housebound or who have limited mobility. Consequently, this response fails the 'do no harm' rule, and it may or may not result in a net benefit.

More generally, as discussed above, where behavioural economics suggests a problem that is not consistent with neo-classical economics, a good understanding of the underlying behaviour is required to formulate consistent policy. Put simply, the neoclassical theory needs to be revisited in order to develop an appropriate policy response.[68] This highlights the benefits to be gained from further research to meld the empirical findings of behavioural and experimental economics with the theoretical underpinnings of neoclassical economics.

The lower left-hand box represents the converse: a problem is identified under the neoclassical approach but not the behavioural approach. In these circumstances, the policy implications appear to be ambiguous. If the actual market outcome does not suggest a problem that requires policy intervention, such intervention would be hard to justify based only on theory.

Section 5: Some concluding thoughts

Currently, substantial parts of consumer protection policy lack a rigorous economic foundation. Neo classical economics treats key aspects of consumer decision making as exogenous and so is unable to explain critical issues for consumer protection. Behavioural economics treats consumer decision-making as endogenous and so is providing important insights into consumer preference formation and choice. However, as yet the two approaches have not been integrated to any extent or in a way that contributes significantly to policy making.

While neoclassical economics attributes consumer risk and potential consumer detriment to supplier market power, either due to the lack of competition or due to informational deficiencies, behavioural economics conceives of consumer risk in competitive markets and when relevant market information is available. Thus, policy prescriptions derived from behavioural economics are likely to aim to change the way consumers respond to supply conditions and to available information. Where this is not possible, the solution is likely to be seen as requiring regulatory intervention. This raises the difficult issue of the weight to be placed on the detriment to some consumers from non-intervention (for example unsophisticated consumers) compared with the detriment to other groups of consumers (for example, sophisticated consumers) as a result of intervention. In addition, while in some circumstances neo classical economics and behavioural economics agree that there is/is not a consumer protection concern, in other circumstances the approaches result in conflicting policy prescriptions, reflecting fundamentally different assumptions concerning preference formation by consumers which are the basis for consumer purchases.

Given this, it is not surprising that policy formulation that takes both approaches into account is likely to encounter a significant area of disagreement as to whether particular conditions are likely to result in consumer risk sufficiently significant to justify intervention. Yet this very conflict highlights the benefits that are available from integrating the two approaches – adding more realistic modelling of consumer decision making to an approach that models supplier behaviour. Development of a more rigorous theory of consumer behaviour, incorporating insights from neoclassical economics and from behavioural and experimental economics may result in a consumer protection policy that is more effective in preventing undesirable conduct. Not only may this reduce the amount of harmful conduct, it may do so at a reduced cost to society. Markets can, and should, be made to work better for consumers.

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[68] As soon as policymakers move away from the 'do no harm' approach to policy, there is a need to weigh up the costs, benefits, risks and uncertainties of any policy. This is a matter for appropriately elected policy makers. However, there is a need to integrate empirical observation with our understanding of consumer behaviour in order to limit the policy risks and uncertainties. Indeed, sensible cost-benefit analysis cannot occur in the absence of such integration.

Endogenous preferences and consumer protection: A view from Japan's legal perspective[69]

Koichi Hamada, Yale University

Today I am asked to examine the theoretical and policy implications of behavioural economics with regard to consumer policy. Behavioural economics is an exciting challenge to conventional economics and it has, in my opinion, a promising future. I will present my opinions on its impact upon economics and its practical significance in the context of Japan's legislative practices and court decisions.

Briefly put, I feel that behaviourists present conceptual critics to the conventional economic thought that was based on rationality. With regard to consumer policies, they provide more *potential* grounds for paternalistic treatment of consumers. After examining actual legal cases, particularly those in Japan, however, I cannot help but emphasise that the paucity of information available to policy authorities substantially restricts the feasibility of effective paternalism in general. The existence of behavioural deviation from *homo economicus* idealised by some economists will not create by itself a necessity for drastic changes in the conduct of consumer policy.

I. Behavioural deviations as endogenous preferences

I do not regard it necessary to explain all the variants of behavioural deviations or anomalies (inappropriate jargon since it assumes that neoclassical economics is the norm) to this audience. I would like to stress that those deviations such as hyperbolic discounting, endowment effect and prospect theory all point to endogenous rather than exogenous preferences. Preferences are not given from heaven but they are formed by experiences. It could mean to be a fundamental criticism on the methodology of economics and definitely that of welfare economics.

In order to assert the solid existence of the endowment effect and other anomalies, the theory needs to pass more tests of scrutiny. I would not repeat the defense of traditional rational choice economics as presented by Richard Posner (1998), but would like to raise the following questions regarding the time dimension of the endowment effect.

The endowment effect may not be distinguished in observations from the lack of information. The reason a person likes Bourgogne wine may be the manifestation of the fact that he had never previously tasted Bordeaux wine. Also, human nature may adhere to the *status quo* but how much and how long? Indeed, how long does one keep attachments to a mug from college or a favourite baseball team? One may eventually find the possession of a mug boring, try to switch or to experiment with another. The avoidance of boredom is another side of human nature. The love-of-variety effect coexists with the effect of loss aversion. At least, the strength of the endowment effect varies with time and with situations.

Thus, the time element for the flexibility of tastes is crucially important. Under different time dimensions human minds can be as obstinate or as capricious as possible. Unfortunately, most experiments cover only a snapshot of time in the life of each subject. I can accordingly argue that behaviourists' criticism is, though it is serious, only partly based on hard evidence. In this paper, however, I will concede

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69 I am much indebted to Yoshiaki Takahashi of the CCP who supplied me with not only the current state of legislations and court decisions in Japan but also pertinent comments on my draft.

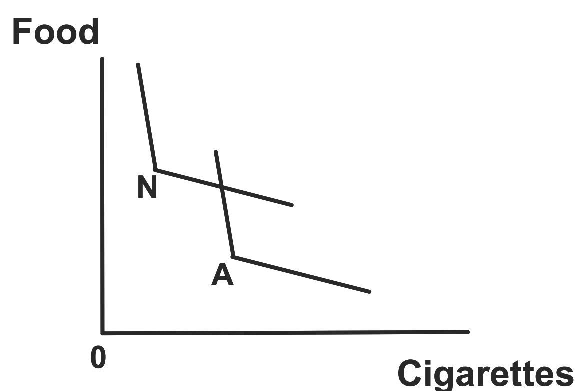
In the early 1980s, I participated in the discussion of the protection of agricultural products like rice at the CCP. This is a return to the Committee after many years, and I am pleased to join the discussion between law and economics over consumer policy.

and ask the following question: Assuming that some of the claims of behaviourists are well grounded, what kind of policy implications do they have in the practices of consumer policy? More specifically, does the existence of the endowment effect and other anomalies imply that we can justify the practice of paternalism more than we might otherwise do in their absence?

II. A simple analysis of endogenous preference.

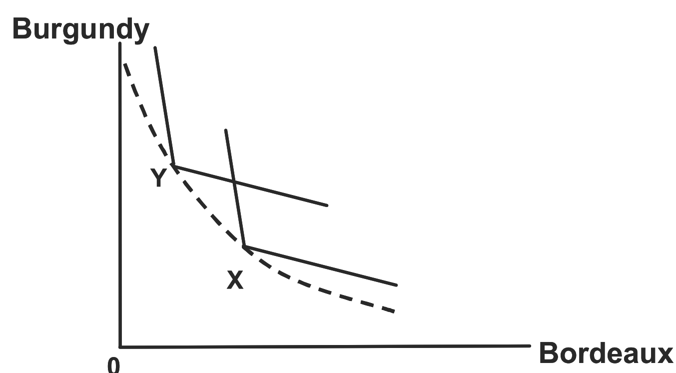
Let us show diagrammatically, some cases of endogenous preference. Figure 1 shows indifference curves of an individual depending on where he starts consuming a good (addictive good on the horizontal axis or the other (non-addictive good). The more rigid the endowment effect, the closer to the right angle will be the kinks of the indifference curves. If the indifference curve stays as the first choice point, then the endowment effect is permanent.

Figure 1. Addiction



There are other authors who believe that the short-run indifference map adjusts to the long-run indifference map that is inherent in an individual. One finds one's true preference by doing. Von Weiszacker (1971) is one of those who are interested in the adjustment of preference. Figure 2 indicates the short-run indifference curve with solid lines, and the true preference with a dotted curve. With more experience and more information, according to this approach, one discovers the true preference. The often observed phenomenon that the long-run demand curve is more elastic than the short-run demand curve corresponds to this shift.

Figure 2. Love of variety



III. Even in the absence of behavioural deviations, paternalism is necessary.

Before going into the relationship between the endowment effect and paternalism, let me point out that paternalism is indeed required in a world where information is not perfect. Examples abound, some of which will be elaborated on further with respect to ongoing regulations and legal practices particularly in Japan.

1) “Multi sales”, that is, the pyramid sales schemes using the “chain letter type” of fortune-making scheme. Customers do not necessarily know the fatal logical pitfall of the scheme.

2) Door-to-door Sales. Customers may be misled by the honeyed words of flattery or even by disguised threats.

3) Unhealthy food. Without inspection by the proper authority, it is difficult for consumers to detect the unsafe product.

4) Dangerous equipments. The same as above.

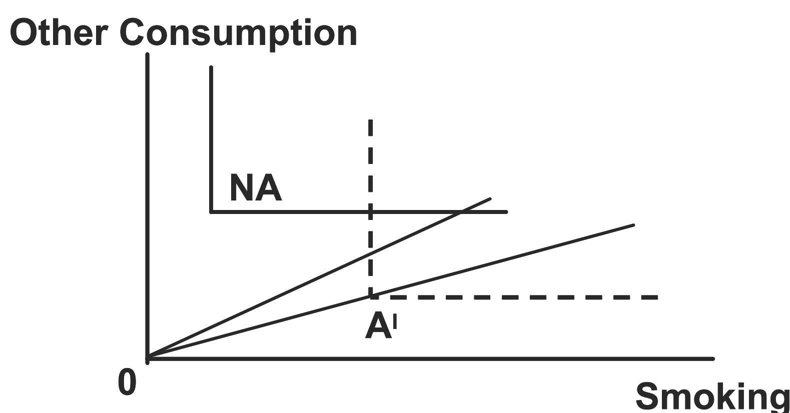
5) Contagious diseases. Not only from information, but also the spread of disease by contagious patients. Government has all the reason to cope with these externalities.

6) Smoking and other addictions. Strong externalities exist as above. Interventions in the last item as well as in the use of narcotics can be, of course, justified by endogenous preference effects as well as by externalities.

Here it is worth noting that traditional economic methods can clarify the case of endogenous preferences in a broader sense.

Becker and Murphy (1988), in their paper entitled, "A Theory of Rational Addiction," analyze the case where the present consumption of narcotics affects the utility in the future, but a consumer knows it. In Figure 3, the indifference curve of an addicted client will shift to the right as the consumer increases the present consumption of narcotics. A drastic policy like imposing abstinence is required to recover the preference of an addict in the right direction. *Laissez faire* is no longer optimal, but rationality of consumers still prevails. Most importantly, the logical basis for welfare economics still remains intact.

Figure 3. Endogenous addiction



IV. Endogenous preferences: Endowment effects, addiction, and hyperbolic discounting.

The cases that behaviourists recently emphasise are not endogenous preferences out of rational choice. The choices are conditioned on past experience or the present endowment but choices are not made through rational calculation of the agent. This remark applies to the case of the endowment (loss aversion), hyperbolic discounting and, in general, prospect theory. In the dynamic context like hyperbolic discounting, the time inconsistency would result.

In the presence of endogenous preferences, naturally paternalism seems to be justified more than otherwise. In cases of hyperbolic discounting, individuals have time inconsistent preferences. Consider an overlapping generation model where the population is growing at the rate of n. Individuals receive a unit of income for each period of their lives, but have such extreme myopia that they prefer to spend all the income in the first period and leave only the minimum subsistence level of consumption in the second period. Then there is a stationary equilibrium where each individual consumes close to two units of consumption during the first period. The interest rate is determined to be equal to r that is higher than n. This is not the case of usury but there would be room for the government to intervene. There is a stronger case for the usury law when individuals are time inconsistent (Laibson, 1997).

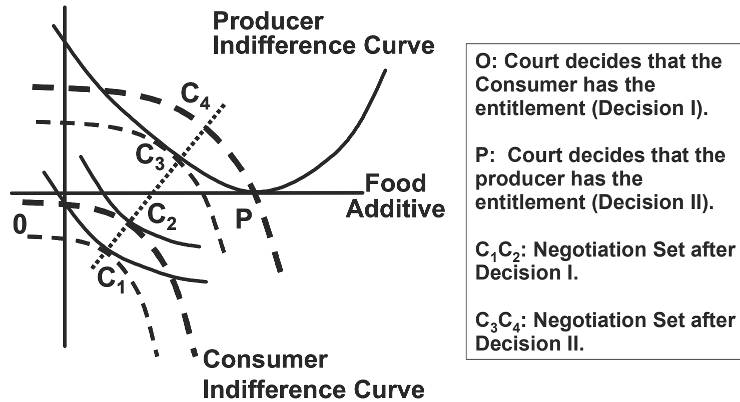
More seriously, and in contrast to the case of rational addiction, the welfare criterion appears to lose solid ground on preferences of individuals because they are no longer fixed.

V. The Coase Theorem and endowment effects

The existence of the endowment effect is often cited as evidence against the Coase theorem, a theorem that is often regarded as the "centre piece of law and economics." The Coase theorem states that, as long as the liability rules are fixed and well-known, then regardless of the rule, the efficient allocation will be realized. The main argument of the attack from behaviourists and the defense from the traditional view (Posner, 1998) are well known and I will not repeat them here. Instead I will present a few simple diagrams to show how the controversy can be translated into economic analysis.

Figure 4 shows a situation in the absence of endowment effects under perfect information where consumers prefer the absolute safety standard, say no chemical additives, for a product, and where producers prefer some but no absolute degree of safety, say a certain level of chemical additives. The positive vertical axis indicates the side payment from consumers to producers. The negative axis indicates the side payment from producers to consumers. The Coase theorem implies the following: If consumers have the right to enjoy an absolute safety standard, that is, they have the right to stay at point O, then the negotiation will lead to the portion of the Contract Curve located between C_1 and C_2. Producers will pay a certain amount to obtain permission to relax the safety standard. On the other hand, if producers have the right to introduce some additives to the product as indicated by point P, then the Contract Curve located between C_3 and C_4 will be the resulting negotiating situation. Consumers, this time, pay a certain amount to make producers reduce the level of additives. In any case the outcomes will be efficient.

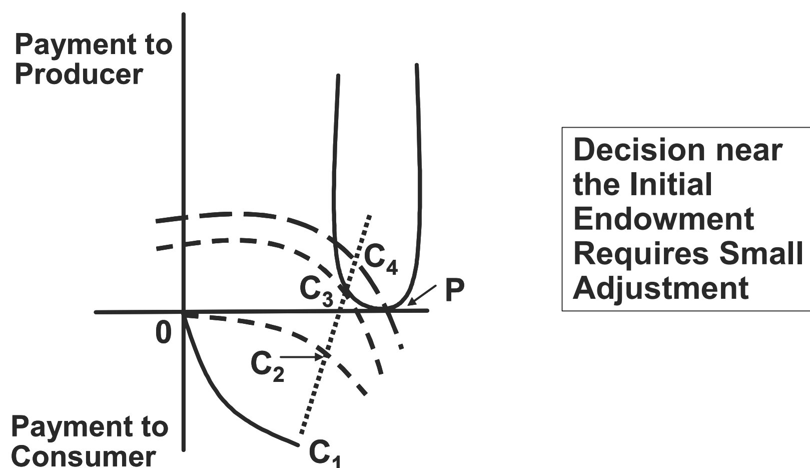
Figure 4.



The Coase theorem claims that both solutions can be efficient. Critics among behavioural economists point out that, first of all, we hardly see the renegotiation taking place from O to C_1-C_2, or P to C_3-C_4. Moreover, since preferences of parties will not be constant but rather dependent on the initial endowment, one cannot easily compare among situations which situations is better. The basis of welfare comparison is at risk here.

What does the endowment effect add to the contract curve diagram? Figure 5 shows the case where producers have the initial endowment and the court endorses entitlement of its initial endowment. The renegotiation in this case will be, if it takes place, in small adjustments. If a court decides to sustain the right of consumers to access food without additives, then the adjustment, particularly the amount of pecuniary adjustment, will be quite large. If by some chance each or both have recognized the entitlement of the position each prefers, and if the preference over additives dominate that over money in a lexicographical way, then the contract curve disappears and the whole game becomes an utter tug of war. One may say, instead, the contract curve becomes a total region in the sense that any movement from a point in the region will mean benefits to one party and damages to the other.

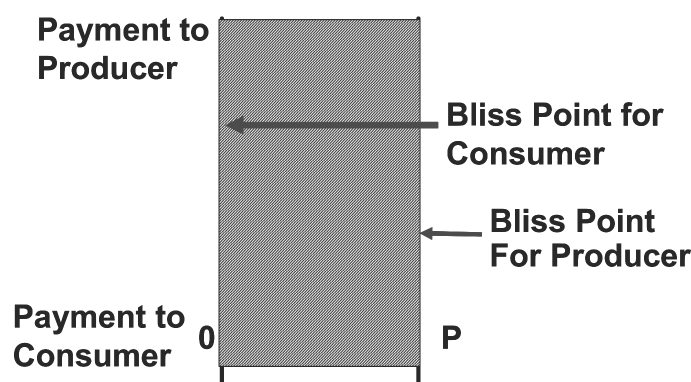
Figure 5. The Coase Theorem and the endowment effect (Producer has the endowment)



This observation may lead to one of the many explanations regarding why legal decisions usually support the *status quo.* Since a large transfer usually involves a dead-weight loss, the support of the *status quo* may prevent a large dislocation of resources as P in Figure 5 implies. Probably, one can find a root for

the tendency of "legal conservatism." The scarcity of observations of renegotiation after the trial is used as grounds for the existence of the endowment effect. Certainly, Figure 5 explains why readjustment after a court decision can be small. Figure 6 indicates the extreme case, where the amount of additive has the absolute importance. If both parties insist on their *status quo'*s, then the whole area will become the contract area. Any place in the area is trivially Pareto optimal.

Figure 6. If both have the endowment effect with lexicographical ordering (Tug of war)



VI. Japanese legislations concerning consumer protection

Let us review the legislation and court decisions regarding consumer protection in Japan from the perspective we have developed here. The principle of consumer policy in Japan is declared in *The Consumer Basic Act* [*Shohisha Kihon-ho*] (1968, and amended in 2004). This law purports to protect consumers from businesses through actions taken by national and local government. Consumers are always portrayed as "weak" parties in Japan, which is mostly right but perhaps not always right. Incidentally, it is interesting to note that the law requests consumers to "behave rationally" and to "volunteer necessary information on consumption."[70] This law is mainly to declare the principles of consumer protection and is not equipped to declare or suggest penalties.

There are other laws that are designed to protect consumers. Among the main legislations are the following: The first three acts are mostly to rescue consumers who suffer from the absence of sufficient knowledge of discount purchases with instalments, door-to door sales, and prepaid coupons. These acts rescue consumers who are taken advantage of by sellers because of the complexity of the system.

1. Act on Instalments Purchase (1961, recently amended 2005). This does not have criminal penalties but the violation of the law affects the validity of contracts and can lead to suspension of business licenses.

2. Act on Specific Commercial Transactions (1976, recently amended 2004). Sanctions for breaking this law are the suspension of l business.

3. Act on the Regulation of Prepaid Coupons (1989, recently amended 2005). Violation will result in suspension of licences.

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[70] Conventional economists strive to assume that consumers are rationally behaving. Here the legislation mildly requests, if not commands, that consumers behave rationally.

The business that employs the use of chain letters, or pyramid schemes[71] generates so many victims that there is a special law in order to alert consumers about it.

4. Act on the Prevention of the Infinite Chain of Fortune (Pyramid Scheme) (1978, recently amended 1988). It is worth noting that it is accompanied with criminal sanctions in the form of fines. Other laws include:

5. Act for Appropriate Contracts for Golf Membership (1992, recently amended 2000).

6. Act for the Safety of Consumer Appliances (1973, recently amended 2005) that has also penalties with fines.

More importantly, given the difference in accessing information and in bargaining power, the Act on Consumer Contract (2000, recently amended 2001) gives a consumer the right to cancel the contract in case of misinformation, misguidance or coercive sales by a business and are affecting court decisions substantially.

VII. Japanese laws are more concerned with information issues.

Only some of the above laws levy penalties, others suspend licences, and the rest affect the validity of private contracts. A majority of them do not intend to take account of endowment biases. As exceptions, Japan has laws that deter and monitor narcotic patients, and also anti-usury laws to limit the range of high interest rates, as follows:

Laws against drug addiction in Japan are, for example, Act Regulating Narcotics and Stimulants (1953, recently amended 2005) and Act Regulating Anti-hypnotic (1951, recently Amended 1999). Both are certainly about addiction and directly dealing with a kind of endowment effect.

Japan’s usury laws are rather complicated. They can be more interesting because they are regarded as measures counteracting the myopic time preference of borrowers.[72]

Under the Law Regulating Borrowing, Lending and Interest Rate (1954, recently amended 2003), a lender should not demand an interest rate above 29.2% in consumer lending. A lender assigning a higher rate of interest will be fined with a criminal penalty.

Under the Law of Interest–Rate Limit (1954, recently amended 1999), on the other hand, a borrower need not pay interests higher than 20%, however the contract is written, but once a borrower has paid it back, he (or she) cannot claim the repayment of the amount he has already paid. Probably this is the most pertinent legislation against myopic behaviour of consumers, though I can never believe that the legislator had any knowledge of behaviourist economics.

VIII. How about the Case Law in Japan?

One of the difficulties of propagating a “law and economics” approach in Japan seems to come from the tradition of the Roman Law there rather than the Common Law. The evolution of law in common-law (or case-law) countries seems to be more suited to accommodate an economic consideration into the law. Of course, as Ramseyer and Nakazato (1999) demonstrate, economic analysis that has developed to analyze common law is intrinsically applicable for a legal system based on Roman or continental law. One

[71] It is known as *nezumi-ko* (rat scheme) in Japan, because rats are considered to multiply very fast.

[72] The shark loan industry in Japan used to be often associated with violent groups as is depicted by movies.

cannot draft legislation that defines every detail of the conditions for application and enforcement. Inevitably, creative processes by court decisions are necessary even in the country with a continental legal system.

Many case decisions exist on the interpretation and enforcement of Usury Laws. Courts usually consistently uphold the regulations that restrict the upper limit of interest rates.

Multi-stage (chain letter or the pyramid scheme) Public Bonds sales are strictly scrutinised by courts. An interesting decision by a district court (Yamagata District Court, 1989.12.26 *Hanrei Jiho* No. 1346, p.140) decided that some level of care-taking is required for applicants to the chain-letter scheme because the scheme is well known in other areas. Based on this requirement of care level for applicants, the court reduced the liability of the seller or organizer of the scheme by comparative[73] negligence by 50%. Some scholars object to this decision arguing that the whole device of the scheme is intended to deceive customers.

In the case of university admission charges and tuition, unduly determined, prescribed compensation liability can be a cause of annulment of a contract with respect to article 9 in Consumer Contract Act. Before the implementation of the Act, court decisions justified no repayment. Therefore, Japanese universities had never repaid it based on the existing provision in the contract between examinees and universities. However, after the implementation, many court decisions decided that the repayment of admission charge after withdrawal from a college is not necessary but they ordered to repaying tuitions (Kyoto district court (2002.7.16, Hanrei Jiho, No.1825, p.46), Tokyo district court (2002.10.23, Hanrei Jiho, No. 1846, p.28) etc.). These judgments affect the financial situation in the universities dramatically.

The following is a case possibly strongly related to the endowment effects. A sales company with accompanying credit excessively encouraged a housewife's purchase of goods. Kushiro Summary court (1994.6.36, Hanrei Taimusu, No.842, p.89) did not allow the creditor's claim for the repayment of the total amount saying that a nation cannot enforce the full repayment of the loans made by the strong encouragement of over-advertisement by the lender. Is this an information problem or a myopia problem? Some scholars cast doubt on the validity of this decision and argue that the reduction of payment should be restricted to cases of violation of the information requirement for the creditor.

In passing, it is interesting to observe with respect to changing preferences, that Tokyo district Court (1987.8.22, Hanrei Jiho, No.1276, p.55) did not allow the recovery of credit to an old person close to 70 years old, saying that he was a retired (absent minded?) professor, bachelor, and equipped with lower decision power. Is this an example of endogenous taste?

IX. The welfare criterion under endogenous preferences

Whatever the reasons, endowment effect, addiction, myopia or others, endogenous preferences present a fundamental problem to welfare economics. Not only that the price mechanism does not provide an efficient allocation of resources, but that the basic criterion to evaluate policy becomes insecure. When a substantial number of addicts are around, on whose preferences can a society base its welfare criterion? Should it base the criterion on preferences of non addicts, preferences of non addicts and addicts before addiction, or preferences of non-addicts and those already addicted? If there are endowment effects, should society always honour the *status quo* solution?

[73] In Japan, comparative negligence is more common than contributor negligence.

This is a Constitutional problem that deserves philosophical investigation. One way out is to examine the Rawlsian approach to Constitution. Consider, according to Rawls, that the constitutional contract is made by participants in the society in the "original position" where each of the participants does not know in what position he or she will be born. In this particular case, no one knows whether one would be born as an addict or non-addict. In other words, each person is under the "veil of ignorance." It would not preclude the case where paternalism is a part of such a constitutional decision making.

Concluding remark

Interventions in consumer policy can be justified in the presence of externality or lack of information on the part of consumers. They can be in principle justified because of the "behavioristic" characteristics of consumers.

As the study of Japan's legal practices indicates, most of the current practices can be supported by the lack of perfect and complete information, and not necessarily by the existence of endowment effects. The results from behaviour economics reinforce some of the grounds for some of the existing interventions. They do not, however, provide dramatically strong cases for new interventions, because it is a rare occasion that the government knows more about the nature of human preferences than private citizens, or more than what the market reveals from aggregating citizens' behaviour.

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