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Productivity Commission

Behavioural Economics and Public Policy

Roundtable Proceedings



Melbourne, 8-9 August 2007

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The Productivity Commission

The Productivity Commission, is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues affecting the welfare of Australians. Its role, expressed most simply, is to help governments make better policies, in the long term interest of the Australian community.

The Commission's independence is underpinned by an Act of Parliament. Its processes and outputs are open to public scrutiny and are driven by consideration for the wellbeing of the community as a whole.

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Foreword

The Productivity Commission convened a roundtable on the topic *Behavioural Economics and Public Policy* at the Sofitel, Melbourne on 8 and 9 August 2007. The invitees included senior government officials, academics, consultants, journalists and representatives from consumer groups. Keynote presentations were given by Prof Eldar Shafir from Princeton University and Prof Bruno Frey from Zurich University.

The roundtable examined the policy implications of behavioural economics — a relatively new field that applies insights from psychology to economic issues and analysis. Participants discussed the contribution that behavioural economics can make to a broader understanding of people’s motivation and behaviour in markets and the implications for policy and regulatory approaches. Behavioural economics has particular relevance to consumer policy, and insights gained through the roundtable made a useful contribution to the Commission’s inquiry on Australia’s consumer policy framework.

As with the Commission’s previous major conferences, the proceedings are being published to enable a wider audience access to the information and insights that emerged. This volume includes papers by the speakers and the responses of the discussants. For each session, there is also a summary of the key points covered in the discussion.

The Commission is grateful to the speakers, discussants, participants and others whose contributions made the roundtable such a valuable exercise.

Gary Banks AO
Chairman

April 2008

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1 Introduction

Gary Banks

Productivity Commission

Welcome to today's roundtable on the policy implications of behavioural economics. The profile of behavioural economics has been increasing in recent years, and the high calibre of the participants sitting around this table demonstrates the level of interest in the topic among the policy community. The Productivity Commission shares this interest, and through this roundtable hopes to get a better understanding of a number of issues that are raised by this developing area of research.

The Commission has long recognised that the assumptions that we make regarding the behaviour of individuals, firms and regulators have important implications for our policy analysis. Likewise, the Commission is aware that the assumptions about people's behaviour that are found in introductory economics textbooks do not always accurately describe how people actually behave. Just as mainstream economics has taken on board the implications of market failures that arise from externalities, imperfect competition and information asymmetry, so our analyses should include the potential for market and government failures that arise from the fact that agents are not perfectly rational, calculating, utility maximisers.

The Commission has a long history of applying emerging developments in economic theory to its work. Examples include the work of the Commission's predecessor bodies in the use of effective rates of assistance, and general equilibrium modelling to measure the impacts of government policies in Australia. More recently, the Commission has taken on board the findings of strategic trade theory and new growth theory, and examined the ramifications of 'social capital' for community wellbeing. Behavioural economics presents a new set of challenges and opportunities to policy practitioners that the Commission welcomes.

This roundtable is the Commission's first event focusing specifically on the policy implications of behavioural economics. But it has considered these issues in its research and inquiries over the years. For example, in a 1994 report on the tobacco industry, the Commission recognised that individuals may be unable correctly to

incorporate information about the risks of smoking into their decisions. It also examined the effects of peer-group pressure and persuasive advertising on individuals' preference formation. It found that some of these factors may support the case for governments to influence individual decisions in relation to smoking. Likewise, in its 1999 report on Australia's gambling industries, the Commission recognised that some gamblers do not act rationally, and that the damage done by gambling addiction to addicts themselves is a policy-relevant cost. In this case, the Commission found that intervention could help gamblers to help themselves.

The Commission is currently conducting an inquiry into consumer policy and a number of submissions to the inquiry and participants in public hearings have drawn on the findings of behavioural economics. For example, some participants have questioned the assumption that providing information to consumers necessarily leads them to make better choices, and have argued that consumers can be confused rather than informed by lengthy disclosure statements. Other participants have suggested that the findings of behavioural economics could be used to assess the likely effectiveness of proposed regulations. We are expecting that this roundtable will contribute to our understanding of behavioural economics for that inquiry and for our other work in the future.

Elsewhere in the Commission, the Office of Best Practice Regulation, which is the Australian Government's watchdog on regulatory practice, is increasingly being presented with regulation impact statements that make a case for policy intervention on behavioural grounds. It is clearly important that we be able to make a well-informed assessment of such rationales.

A relaxation of the assumption that agents are rational, calculating, utility maximisers opens up a raft of challenges for policy analysis. It has been observed that there is only one way for people to reach the optimal outcome identified by the classical economic models, but a thousand ways to miss that outcome. Harvard Professor Edward Glaeser has described this as 'Tolstoy's Corollary on Suboptimal Behaviour'. Tolstoy's famous introductory line in *Anna Karenina* noted that: 'Happy families are all alike. Every unhappy family is unhappy in its own way'. Glaeser says that the same holds for economic theory: every rational, well-informed, utility-maximising agent reaches the optimal outcome in the same way. Every real person, firm or policy maker that misses that point has missed it through their own unique behaviour.

In many cases where people make bad choices, the consequences may not be very serious. We each make hundreds of choices every day, and are continuously learning from our actions and from the actions of other people. We can respond to the consequences of bad decisions by changing our behaviour to prevent further damage and possibly undo past damage. We can set goals, routines, or personal

rules. We can even cut up our credit cards, swear off fast food and join a gym, or unplug the television and read a book. Provided that we can recognise the consequences of our choices and respond in time, there would seem to be little argument to support government intervention on the grounds of behavioural biases. In some cases, however, it is difficult for people to recognise that they *are* making bad choices, and to respond in time to recover from their losses.

The behavioural economics literature describes circumstances where people's behaviour is systematically biased in one way or another. For example, behavioural economists have demonstrated that people have inconsistent attitudes to risk, uncertainty, and discounting that lead them to make decisions that they may regret later in life. Experiments in the laboratory and results in the real world have shown that people's sensitivity to losses relative to gains is greater than implied by the expected-utility approach. Behavioural economics has highlighted the importance of contextual or 'framing' effects in decision making. And experiments and everyday observations have confirmed that some decisions are influenced by altruism and fairness — not just by narrow self interest.

While few people would dispute these findings, the policy implications are still very much open to debate. One of our keynote speakers, Professor Bruno Frey, has suggested that although people can exhibit systematic behavioural biases, it does not necessarily follow that governments should intervene. He and his colleague Alois Stutzer (2006) identified a number of situations where individuals tend to misjudge the 'utility' they will gain from certain activities, and are left worse off because of it. For example, people who watch a lot of television often find themselves regretting the time wasted (at least, after the event). And people who commute long distances to work in order to live in better houses further out of town tend to underestimate how burdensome they will find the commute. Stutzer and Frey (2006, p. 21) found that these results give 'no cause for immediate government intervention', but do raise questions about the appropriateness of government subsidies for activities that are subject to excessive consumption, which can be a widespread phenomenon.

While these results may provide some justification for relatively benign policies such as information provision, other researchers support more activist interventions. University of Chicago academics Cass Sunstein and Richard Thaler use the term 'libertarian paternalism' to describe an approach to policy design that stems from the observation that the way in which decisions are framed can have significant effects on outcomes (Sunstein and Thaler 2003). Advocates of this approach have proposed policy interventions to influence the decision context, to help people make the 'right' choice. *The Economist* described advocates of 'libertarian paternalism' as being like generous uncles who try to give their younger relatives the benefit of

their experience:

Their aim is not the ‘nanny state’, a scold and killjoy forcing its charges to eat their vegetables and take their medicine. Instead they offer a vision of what you might call the ‘avuncular state’, worldly-wise, offering a nudge in the right direction, perhaps pulling strings on your behalf without your even noticing. (*The Economist* 2006, p. 65)

One area where this approach has been proposed is in retirement-savings plans where, for example, firms may be required to enrol new workers automatically in a savings plan, while allowing them to opt out at any time. Experiments have shown that the decision made as to the default setting can significantly increase levels of participation in such schemes (although the effect on overall savings may not be as great).

Other researchers have advocated policies that go further than ‘libertarian paternalism’. It is often observed that the patterns of people’s choices imply that much larger discount rates are applied to the distant future than to the near future. This can lead people to make decisions that hurt them later in life, such as saving too little for a comfortable retirement. A ‘libertarian paternalist’ may suggest changing the default option on savings plans. A ‘harder’ paternalist would legislate compulsory superannuation contributions. Or, to change the example, a ‘libertarian paternalist’ may suggest that cigarettes be sold in packets of three; a ‘harder’ paternalist, that governments should levy ‘sin taxes’ to reduce our consumption of products that we want to consume now, but that could do us harm in the long run. Thus, Gruber and Koszegi (2001, p. 1263) estimated that the so-called ‘internalities’ — costs imposed by ‘present selves’ on ‘future selves’ — arising from cigarette smoking are of the order of US\$30 per pack. They proposed that even modest time-inconsistency in smokers’ preferences would justify an additional tax of US\$1 per pack.

While there have been relatively few policy interventions that have been explicitly attributed to the findings of behavioural economics, many long-standing policies have been based on a view of how people behave in the real world. This roundtable is an opportunity for further discussion of how policy makers’ understanding of people’s behaviour has influenced policy development, and specific examples of policies designed to address behavioural biases. Behavioural economics has the potential to formalise our understanding of some of the characteristics of people’s behaviour that policy makers have been acting on intuitively for years. To explore this potential today, the Commission would like to address two broad groups of questions.

The first group is concerned with the extent to which the behavioural approach can help policy makers *achieve given policy goals more effectively*:

-
- In what circumstances are the usual economic assumptions regarding behaviour likely to diverge from reality to such an extent that their use would have adverse consequences for our analysis?
 - What alternative (and workable) assumptions could we make that more accurately characterise people's behaviour?
 - How do 'framing' and context influence decision making? When do policy makers need to explicitly take these effects into account?

The second group focuses on whether the findings of behavioural economics can be *used to support or justify particular policy goals*:

- If the choices that people make in markets do not represent their 'true' preferences, what benchmarks should policy makers use in assessing the costs and benefits of intervention? Can evidence from experimental economics determine what people's 'true' preferences are, and what are the implications of using this kind of evidence?
- Policies that address behavioural biases can have distributional impacts. The benefits may flow to naïve consumers but more savvy consumers may bear some costs. What consideration should we give to the distribution of the costs and benefits of policies that address behavioural biases?
- What are the possible consequences of letting governments deliberately influence the choices that people make? Should we set limits on how and when governments can intervene to address behavioural biases?
- Can the findings of behavioural economics contribute to the way we design institutions to minimise the costs of mistakes made by policy makers and regulators?

Of course, we are not confronted with an either/or situation of having to choose between mainstream and behavioural economics. To pick up the earlier example, there may be a number of reasons for governments to encourage private saving. One is the conclusion from classical welfare economics that progressive income taxes have a negative effect on savings rates. Another is the finding from behavioural research that people are myopic and underestimate the costs of living in retirement. Both the classical and the behavioural approaches to the issue of saving show that there are distortions that may justify government intervention to improve on market outcomes.

I hope that this framework provides a useful springboard for today's roundtable, and I look forward to our discussions.

PART A

INTRODUCTION TO THE ISSUES

2 A behavioural background for economic policy

Eldar Shafir

Princeton University

2.1 Introduction

How policy ought to be designed and implemented largely depends on what people are like. What are their strengths and their weaknesses? What do they naturally do well, and where do they typically do things badly? What can they be taught, or be expected to abide by, and what goals must be achieved through other means, such as laws and regulations? Our answers to these questions will fundamentally influence where we choose to focus our consumer protection efforts, and what we try to achieve through them. This paper reviews recent behavioural research focusing on people's proclivities and limitations, with a focus on fundamental aspects of decision behaviour where standard theoretical assumptions are likely to yield misleading expectations and, consequently, suggest potentially misguided policies. It argues that a view of decision behaviour informed by empirical research rather than theoretical assumptions may help bring about more successful policy analysis and implementation.

Policy has typically been influenced by two perspectives. The first, based on the 'rational agent' model, relies on analytic, *a priori* analyses of the making of rational decisions. It is the perspective typically promoted in business and policy schools, and it has come to dominate much of economics and the social sciences, as well as the formulation and conduct of policy. The second, 'folk psychology', perspective is driven by our intuitive understanding of the decisions that people make and of the factors that motivate and influence them. Part of what has made the normative view so appealing has been its general affinity with intuition: normative theory assumes that preferences are typically stable, and responsive to a variety of cost–benefit considerations, in a fashion that most naïve respondents, upon a moment's reflection, readily endorse. At the same time, people's intuitive views also play a role because we recognise that some normative assumptions — from infallible

memory to pure self-interest — are too extreme, and we attempt to mould policy accordingly.

As it turns out, many of the empirical findings regarding human behaviour tend to be non-normative and counterintuitive. Not only are people's decisions often inconsistent with normative desiderata; they violate simple intuitive expectations as well. A behaviourally more informed view, it is suggested below, can help enrich our understanding and analysis, and can help create better policy.

2.2 Two fundamental facts about behaviour

Two fundamental facts are at the core of the tension between standard normative assumptions and actual behaviour. The first is 'construal', the notion that decision-makers need to construe a representation of the relevant decision problem in their minds. The other is the 'power of the situation', the fact that such construal is heavily impacted by the context of decision. (For further discussion, see Shafir, 2007, from which parts of the discussion below are reproduced).

A major development in psychological research has been the appreciation of the role of 'construal' in mental life. People do not produce direct responses to objective experience. Rather, stimuli are mentally construed, interpreted, and understood (or misunderstood). Behaviour is directed not towards actual states of the world, but towards mental representations of those states. And mental representations do not bear a one-to-one relationship to states of the world that they represent, nor do they always constitute faithful renditions of those states. As a result, well-intentioned policy interventions can fail because of the way in which they are construed by the targeted group, perhaps as an indication of what the desired behaviour might be, or 'as an insulting and stigmatising exercise in co-option and paternalism' (Ross and Nisbett 1991). For example, people who are rewarded for a behaviour that they would otherwise have found interesting and enjoyable can come to attribute their interest in the behaviour to the reward and, consequently, come to view the behaviour as inherently less attractive (Lepper, Greene, and Nisbett 1973). Similarly, the imposition of a fine may be interpreted as a price to be paid, thus increasing the frequency of undesirable behaviours that are thereby made to look like they are being paid for and thus rendered more acceptable (Gneezy and Rustichini 2000b).

For another example, Cialdini (2001, 2003) discusses nuances in messages intended to produce socially beneficial conduct, which can easily backfire. There is an understandable tendency, Cialdini explains, to try to mobilise action against a problem by depicting it as regrettably frequent. Information campaigns proclaim

that alcohol use is intolerably high, that adolescent suicide rates are alarming, or that rampant polluters are spoiling the environment. Although such claims may be true and well-intentioned, they may miss something critically important: within the intended injunctive statement ‘many people are doing this undesirable thing’ lurks the powerful and undercutting descriptive message ‘many people are doing this’. And the latter message stands to imperil the appeal intended by the former.

This brings us to the other fundamental fact about human behaviour, namely, that it is a function of both the person and of the situation (Ross and Nisbett 1991). One of the most striking lessons of behavioural research has been the great power that context exerts relative to the presumed influence of beliefs, preferences, and personality traits, and, at the same time, a persistent tendency among people to underestimate this power of the context. 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 per cent stopped, the remaining 90 per cent simply stepped over the victim and rushed 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 and 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 (1951), who coined the term ‘channel factors’, 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 illustrative 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 were then invited 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 per cent actually took the step of getting themselves inoculated, compared with 28 per cent 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 themselves 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 and 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, put themselves in situations which are powerful enough to make them act and choose contrary to what they had intended.

Of course, what policy makers ought to do in the face of such failures is by no means obvious. If there are easy ways to shelter people from systematically-misguided or ill-informed decisions, that seems worthy of consideration. On the other hand, most of us are rightly worried about interventions with our freedoms. Some also think that excessive regulation may lead to a lack of learning, or sophistication, or responsibility in a population that will grow increasingly complacent. Without needing to take a strong stance on this debate, we shall simply assume in what follows that a better understanding of behaviour will allow for more nuanced solutions, whichever seem most appropriate.

2.3 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. Consider, for example, the role of decisional conflict and its implications for the proliferation of alternatives. The classical view of decision-making does not anticipate nor does it consider the implications of decisional conflict. Each option, according to the standard view, is assigned a subjective value, or 'utility', and the person then proceeds to choose the option assigned the highest utility. As a consequence of 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 her utility function.

In contrast, because they are typically constructed in the context of decision, preferences can be hard to determine. People tend to 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 has been shown to yield a greater tendency to search for alternatives when better options are available but the decision is hard, than when relatively inferior options are available and the decision is easy (Tversky and Shafir 1992). Rather than being a plus, a proliferation of alternatives can 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 and Lepper 2000; Shafir, Simonson, and Tversky 1993; Tversky and Shafir 1992). In one study, 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 per cent proceeded to purchase a jam in the 6-jams condition, whereas only 3 per cent 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 et al. (2005) conducted a field experiment with a local lender in South Africa to assess the relative importance of various subtle psychological manipulations in the decision to take up a loan offer. Clients were sent letters offering 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 a table with either one or four examples of loan sizes and terms, along with respective monthly repayments. In contrast with standard economic prediction and in line with conflict-based predictions, higher take-up was observed under the simpler 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 drops as the number of fund options proposed by their employer increases.

Adherence to defaults or the 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. While only about 20 per cent of New Jersey drivers chose to acquire the full right to sue, approximately 75 per cent of Pennsylvania drivers chose to retain it. The difference in adoption rates had financial repercussions estimated at nearly US\$200 million (Johnson et al. 1993). A second naturally occurring 'experiment' was recently observed in Europeans' decisions regarding being potential organ donors (Johnson and 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 per cent in the former nations and about 15 per cent in the latter, a remarkable difference given the low transaction costs and the significance of the decision.

While the addition of options can generate conflict, thereby increasing the tendency to refrain from making any decision, options can sometimes be manipulated to 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 likelihood of choosing A (Huber, Payne and Puto 1982). For example, a choice between \$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 and Tversky 1992).

The point behind these inconsistencies is that minor contextual changes can alter preferences in ways that are unlikely to correspond to outcome utilities. Of course, the fact that consumers are influenced by conflict and context need not immediately imply that choices ought to be taken away, or even that the number of available alternatives ought to be restricted. It does suggest, however, that a proliferation of alternatives, which is where many consumer markets are steadfastly heading, needs to be addressed and handled with care, rather than be considered an obvious advantage. It also suggests that the determination of a default outcome, for example, rather than a mere formality that can be effortlessly changed, needs to be chosen thoughtfully, since it acquires a privileged status. In effect, when proliferating

options or the status quo are inappropriately handled (intentionally or not) this can decrease consumers' welfare in ways that normatively would be, at best, unanticipated.

Several other behavioural factors can influence the outcome of consumer decisions in ways that standard analysis is likely to miss. People are often 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 and Blumer 1985; Gourville and Soman 1998); and by effects of sequencing and of temporal separation, where high discount rates for future as compared to present outcomes can yield dynamically inconsistent preferences (Loewenstein and Elster 1992; Loewenstein and 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 what appear as losses (Kahneman and Tversky 1979). Also, people are loss-averse — the loss associated with giving up a good is substantially greater than the utility associated with obtaining it (Tversky and Kahneman 1991). This, in turn, leads to a general reluctance to depart from the status quo, because things that need to be renounced are valued more highly than comparable benefits (Knetsch 1989; Samuelson and Zeckhauser 1988).

In their intuitive mental accounting schemes, people find it difficult to evaluate items in a consistent manner through time (Shafir and Thaler 2006), and they 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). Contrary to standard fungibility assumptions, people then exhibit differential propensities to spend from their various accounts, which yields consumption patterns that are overly dependent on current income and sensitive to labels with, for example, people saving and borrowing (often at a higher interest rate) at the same time (Ausubel 1991).

What is common to many of these patterns is the overly 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.

2.4 Some other relevant behavioural facts

Identity

Recent research has highlighted the relevance of identity-salience for people's decisions (see for example, Benjamin, Choi and Strickland 2006; LeBoeuf and Shafir 2006, and references therein). People derive their identity in large part from 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' conjuring up strikingly different values and priorities than others, like 'CEO'.

In one remarkable study, Asian-American women (whose two salient identities, Asian and woman, entail conflicting expectations regarding mathematical ability) scored higher on a math test after completing a brief survey that evoked their ethnicity than did those — randomly assigned — 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); voting (Berger et al. 2006); the rating of consumer products (Reed 2004); as well as consumer decisions. In one study, college students whose 'academic' identity had been made salient were likely to opt for more academic periodicals (for example, *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 (for example, for individuality and uniqueness over collectivism and conformity) compared with when their Chinese identities had been triggered (LeBoeuf 2002; LeBoeuf and Shafir 2006).

Evoked identities tend to activate concepts and priorities that are associated with particular tastes and values (cf. Bargh, Chen and Burrows 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/CEO might happily accept a professional weekend invitation while at work only to regret having to absent herself from the children once back at home.

Similar phenomena may be observed when stereotypes that involve perceived competence and intellectual or professional ability interfere with consumers' confidence and willingness to engage in various transactions. People targeted by negative stereotypes are more likely to mistrust other people's motives (Crocker et al. 1991; see also Cohen, Steele and Ross 1999), may expect to be socially rejected

on the basis of the group to which they belong (Mendoza-Denton et al. 2002; Shelton and Richeson 2005), and may experience stereotype threat — the fear of confirming a negative stereotype about their own group (Aronson 2002; Steele 1997; Walton and Cohen 2007). 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).

The foregoing discussion suggests possibilities that would not typically form part of the policy analyst's repertoire. For example, the potential to affect consumer empowerment: when offering programs intended for lower-SES participants (who are known stereotypically to be seen as less capable). The very fact that these are presented as explicitly intended for welfare recipients or the working poor may trigger particular identities in the intended recipients that are less responsive to the offered program than if more conducive, or capable, 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's hard to find and language at an inappropriate level, are all not just hassles to be grappled with and overcome, but can become 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 fingerprinted (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. Hassle factors such as these may appear negligible in standard cost-benefit analyses, but they are the kind of relatively minor barriers whose removal may open significant channels for improved welfare.

Time

People's discount rates tend to be unstable and influenced by factors, such as the size of the good and its temporal distance, that are not subsumed under standard

normative analyses (Frederick, Loewenstein and Donoghue 2002; Loewenstein and Thaler 1989). When asked what amount of money in the future would be comparable to receiving a specified amount today, people typically require about \$60 in one year to match \$15 now, but they are satisfied with \$4000 in a year instead of \$3000 today. This implies discount rates of 300 per cent in the first case and of 33 per cent in the second. Furthermore, because discount functions are non-exponential, a one-day delay has greater impact when that day is near than when it is far. Thus, many who would prefer an apple today over two apples tomorrow, would nonetheless prefer two apples in 31 days over one apple in 30 days, which can lead to dynamically inconsistent preferences (Thaler 1981).

Excessive present discounting, also known as myopia, is often observed in people's attitudes towards distant future outcomes (Elster 2000; Elster and Loewenstein 1992). Loewenstein and Thaler (1989), for example, discuss an intervention in West Virginia in which the high-school dropout rate was reduced by one-third when potential dropouts were threatened with the loss of their driving privileges. This immediate threat had a significantly greater impact than the far more serious but more distant socio-economic implications of failing to graduate from high school. In a similar vein, physicians reportedly lament the fact that warning about the risk of skin cancer from excessive sun exposure is less effective than warning about sun exposure's tendency to cause acne. In fact, 'quit smoking' campaigns have begun to stress the immediate benefits of quitting (quick reduction in chances of heart attack, improved ability to taste foods within two days, and so on) more prominently than the substantial long-term benefits (American Lung Association 2003). Similar reasoning applies in the context of medical self-examinations and the promotion of safe-sex practices, where immediate discomfort or gratification can overwhelm much greater, but temporally distant, considerations (Schelling 1980, 1984).

The tendency to delay decision in situations of conflict, as described earlier, can contribute to apparent procrastination, since, in those situations, things tend not to get done not because the person has chosen not to do them, but because the person has chosen not to do them now. To illustrate this point, Tversky and Shafir (1992) offered students \$5 for answering and returning a long questionnaire by a given date. One group was given five days to complete the questionnaire, a second group was given three weeks, and a third group was given no definite deadline. The corresponding rates of return were 60 per cent, 42 per cent, and 25 per cent. Thus, the more time people had to complete the task, the less likely they were to do it. Just as the addition of options enhances the tendency to defer decision, so can the addition of time enhance the tendency to delay action.

This form of procrastination has non-trivial implications for what would otherwise be considered generous time periods during which to send no-penalty payments,

return unwanted purchases, apply for rebates, or sign up for a variety of entitlements. If when provided longer periods people are actually less likely to follow up, then the impact of these various offers, whether intentional or not, may benefit from a reassessment. In fact, temporal effects can have far-reaching implications for thinking about policy. Be it access to retirement funds, encouragement to save, or exhortations to diet, or to practise safe sex, inconsistent and high discount rates have important implications, which are universally observed and have been extensively discussed. They can lead to puzzling self-control arrangements, ranging from negative-interest savings devices and self-restraining services, to clever alarm clocks, and cooling periods.

Knowledge and attention

A standard assumption is that consumers are attentive and knowledgeable, and typically able to avail themselves of important information. Instead, there often appears to be a rampant ignorance of options, program 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 have their investments in.

Cognitive load, the amount of information currently 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 stigmatising (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).

Emotions

Much of literature and the arts is devoted to the eternal tension between passion and reason, and to the influence that heightened states of arousal can have on actions that conflict with long-term interests. At a more mundane level, emotional

reactions, often undetected, can also influence decision making. Indeed, transient moods influence choice and judgement in ways that neither rationality assumptions nor intuition predict (Zajonc 1980; Zajonc and Markus 1982). Negative moods, for example, can increase the perceived likelihood of bad outcomes and the frequency of undesirable events (such as homicides) and correlate with a decrease in judged life satisfaction, while positive moods act in the opposite direction (Johnson and Tversky 1983, Schwarz & Clore 1983). Those in positive moods, furthermore, often engage in attempts at 'mood maintenance', for example, through greater risk-aversion (Isen and Geva 1987; Isen, Nygren and Ashby 1988). Raghunathan and Pham (1999) have suggested that sad individuals tend to be more risk-prone, whereas anxious individuals are more risk-averse. They attribute these tendencies to the notion that anxiety and sadness convey different information to the decision maker and prime different goals, with anxiety promoting an implicit goal of uncertainty reduction, and sadness an implicit goal of reward achievement.

An 'affect heuristic' has been proposed, according to which spontaneous and effortless judgements are often made through quick consultation of positive and negative affective feelings (Finucane et al. 2000; Slovic et al. 2002). The role of emotional reactions can be witnessed, for example, in the inverse relationship commonly observed between perceived risks and benefits, such that activities that are thought by people to have great benefits are seen by those same people as presenting few risks, and vice versa. Typical of a heuristic outcome, this unlikely inverse relationship, purportedly mediated by affect, is strengthened under time pressure (Finucane et al. 2000; Fischhoff et al. 1978). In a similar vein, both the perceived frequency of common events and the perceived likelihood of risks such as nuclear power are related to the amount of dread that they arouse (Fischhoff et al. 1978; Lichtenstein et al. 1978).

Emotionally evaluative responses can have a non-negligible effect on decisions. For example, people are apparently willing to pay more to insure, and are more likely to seek compensation for, an item that is emotionally meaningful than for an emotionally neutral but equally valuable item (Hsee and Kunreuther 2000). More generally, Loewenstein et al. (2001) suggest that 'anticipatory emotions' (for example, emotional reactions to potential outcomes in a risky situation) can influence the cognitive appraisal of decision situations and can impact on choice. Shiv and Fedorikhin (1999) consider situations in which consumers are influenced by automatically-evoked affect as well as by more controlled cognitions, and present findings suggesting that when processing resources are limited, spontaneous affective reactions have a greater impact relative to cognition, compared with when the availability of processing resources is high.

Transient emotions, often triggered by local contextual factors, can thus influence

the construction of preference. Grocery shopping while very hungry, for example, is likely to lead to purchases that would not have been made under normal circumstances (cf. Loewenstein 1996). And even when people are aware of being in the grip of a transient emotion, they typically fail to ‘correct’ adequately. In one study, respondents were asked to predict whether they would be more bothered by thirst or by hunger if trapped without food and water. Some were asked before exercising (when they were not especially thirsty) whereas others were approached immediately after exercising (and, thus, were thirsty). Post-exercise, 92 per cent indicated that they would be more troubled by thirst than by hunger, whereas pre-exercise only 61 per cent did (Van Boven and Loewenstein 2003). In general, people tend to underestimate the degree to which various contextual changes will impact on their sentiments and preferences (Van Boven, Dunning and Loewenstein 2000; Gilbert et al. 1998). This contributes to what look like myopic decisions, as people honour present inclinations, not appreciating the extent to which they may be due to factors that may soon change.

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 (Mandel and Johnson 2002; Verplanken and Holland 2002).

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

with price in the decision to take up a loan (Bertrand et al. 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 than 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 randomised. 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 on 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 judgement 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.

2.5 Concluding comments

People do not respond directly to objective facts; rather, stimuli are mentally construed, interpreted, and understood (or misunderstood). Critical for the success and effectiveness of policy interventions is the need to devise contexts in ways that do not merely provide all the options and convey the correct information, but that also are able to trigger the construal most likely to generate the appropriate interpretation and response. Human behaviour is the outcome of a system — the human information processing system — that is idiosyncratic and complex. While many of us endorse the normative principles of the classical theory 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 years 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.

Indeed, examples of ‘bad psychology’ abound (for related discussion see, Bertrand, Mullainathan and Shafir, 2006).

Theory makes highly plausible and intuitively compelling assumptions that simply happen not to be good descriptions of how people behave. Assumptions about novelty- and variety-seeking stand in contrast with the status quo bias and the reluctance to decide in the face of a proliferation of alternatives; assumptions about planning and self-control ignore the actual power of contextual factors, ranging from strong temptations to the impact of imperceptible nuances; and minor psychological obstacles and channel factors have consequences that are substantially greater than any plausible cost–benefit analysis would ever imply.

Because preferences can be malleable, confused, and misguided, consumers can benefit from some attention and help. One form in which these may be delivered is through laws and protections appropriately structured to defend against others’ unwelcome influences, which may take any of a number of forms, including misleading advertising, hidden clauses, pressure tactics, and so on. Another, perhaps less obvious form of help, could consist of clever arrangements structured to combat consumers’ own weaknesses, such as bad planning, myopia, procrastination, overconfidence, forgetfulness, distraction, peer pressure, confusion, susceptibility to framing effects, misguided beliefs, and other such very human traits. Much 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 designs include seatbelt laws, which provide a simple safety measure that is habitual and largely unquestioned; organ donor defaults, wherein drivers default into being an organ donor when they do not elect to opt out (an arguably superior alternative to that generated by an opt-in arrangement); per-unit pricing, which allows comparisons that most people would not conduct intuitively; and direct deposit and retirement savings schemes, which are an effective way to circumvent the mental accounting impulse to spend freely the cash found in one’s pocket or checking account. Standard restraints on premature access to retirement savings are another example, whereas the attempt to limit such restraints (currently under way in the US) is an example of the failure to appreciate human fallibility and its potentially dire consequences.

As it turns out, a behaviourally informed perspective may also need to reconsider

what ought to count as ethical, and perhaps legal. According to the standard view, people are well informed and in control. Enticements that ought to be avoided, if harmful enough will be avoided. Information that is hard to find or to understand, if deemed important enough will be located and deciphered. Instead, behavioural research provides ample illustration that even minor obstacles on the way to highly valued goals can become misleading and decisive. (Bertrand, Mullainathan and Shafir 2006).

Consider, in this vein, 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. (Frontline 2004)

The average American family now owes roughly \$8,000 on its credit cards and, not surprisingly, the flurry of unexpected fees and rate hikes often comes just when consumers can least afford them.

Naturally, such tactics 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 realise 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.

Regulating such markets, of course, is a non-trivial proposition. On the other hand, some regulation seems attainable once human frailty is recognised. 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, occurs not only when loved ones die. Recognition of everyday quirks, limitations, and just plain (and in many ways remarkably impressive) human nature suggests we ought seriously to consider ways to attain a healthy balance between libertarianism and paternalism (Sunstein and Thaler 2003), or between free market competition and consumer protection (Gans 2005; Sylvan 2004). A more nuanced understanding of people’s strengths and limitations in the contexts where they need to succeed has the potential to yield more effective policies and increase human welfare.

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Introduction and caveats

This short note discusses the issues raised by Shafir’s thought-provoking piece on the lessons of the emerging field of behavioural economics for policy makers. The first thing to say is that Shafir focuses on a small subset of behavioural economics, that is, the experimental field concerned with behavioural ‘abnormalities’. I will term this field ‘anomaly economics’. Excluded from Shafir’s discussion are the fields within behavioural economics that also try to expand on the standard models by the inclusion of additional terms into the utility function of otherwise rational and mainly greed-motivated individual maximisers. These excluded fields contain the importance of reference groups, of social norms, of fairness considerations, of trust, and of the measurement of utility itself. What will be said in this note applies only to anomaly economics, not to these other fields and hence not to the whole of behavioural economics.

In the rest of this note, I will first briefly summarise the essential arguments Shafir raises and then set out the questions they lead to.

Summary of Shafir in plain English

The main point that Shafir makes is that individuals are much less rational than economists pretend in models. The notion that individuals on balance attempt to rationally maximise their wealth goes back at least to Jevons (1871) and has been the cornerstone of economic policy advice and modelling. Classical economists such as Smith (1776), Marshall (1890), and Knight (1921) knew perfectly well that they were abstracting from more complex underlying behaviour but found themselves unable to work out how to incorporate real-life complexity into their stylised understanding of the economy. In a sense, the field of abnormality economics is exciting precisely because of its explicit aim of filling this gap that was deemed too hard to get into by economists of previous ages.

So what does Shafir want us to include into our models and our policy advice? A simple rule of thumb, like the one on wealth maximisation, or perhaps three or four rules of thumb about when and where which anomaly arises? No, Shafir wants us to fully comprehend all the deviations of rationality people in practice get up to. The list is virtually endless, but one can summarise them by saying:

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1. People often do not know what they want. When presented with too many choices, they experience ‘decisional conflict’ that often leads them not to make a choice at all, at least not immediately. This makes it possible for them to be manipulated in their choice by ‘priming’ them into looking first at a particular alternative. This implicitly means that the ‘framer’ of the question has power and thus responsibility.
 2. People often do not know who they are. Their identities are evoked and they can be manipulated into behaviour by emphasising a particular identity associated with particular behaviour (and even particular skills).
 3. People often do not know where they are coming from or where they are going. Their learning from past mistakes is limited; that is, they will engage in ‘cognitive dissonance’ if an experience does not fit their mental beliefs and will simply discard the information. When confronted with too much information, the ‘cognitive learning load’ becomes too much and they will simply shut down. Their view of themselves in the future can be manipulated, leading to ‘unstable discount rates’.
 4. People are often not really able to work out anything complex, and react emotionally. Their attention span is very limited; they make lots of basic computing errors, especially in the field of perceived probabilities of risk; they follow herd-like heuristics; are overly prone to give into fear; and have emotional connotations with events that often dominate their reason.
 5. People do not want to be told they are idiots either (this is not in the paper, but I add it because it is also important): they care about self-esteem (Brennan and Pettit 2004) and will go to extraordinary lengths to protect themselves from information and opinions detrimental to their inflated opinions of themselves.

I will refer to the points above as ‘The List’.

After presenting his list of anomalies and giving us nice anecdotal research to make it indeed entirely plausible that these all exist and are important for real-life decisions by people of flesh and blood, Shafir attempts to draw some policy conclusions. Shafir’s policy conclusions are a little weak, it has to be said. His paper is full of the usual ‘we should take into account’ and ‘we may also need to reconsider’ and ‘policy should be carefully crafted’, but he essentially leaves it up to the reader to work out what any item on the list means for policy advisers. Indeed, he gives no real suggestions for new policies, but rather mentions policies that were enacted in an era preceding ‘anomaly economics’, presumably as evidence that ‘anomaly economics’ has a point. This includes safety belts (protecting people from their inflated egos); forced savings (protecting people from their inability to plan); changing default options on being a donor (protecting people

from their laziness); per unit price labels (saving people from their basic calculus limitations); and financial regulation (saving the sheep investors from the financial experts, that is, the wolves).

The questions that need to be addressed that are raised by this piece are:

1. Who is mentally able to integrate all these anomalies into our policy thinking?
2. What would be the likely consequences if we were officially to adopt The List as a set of issues that policy needs to take account of?
3. Could we politically sell the incorporation of The List to the voters, politicians, and the media?
4. Conclusions — has our more intimate knowledge of human frailties got us any further than the road set upon by the classical economists?

Let us address each of these points in turn.

Who is mentally able to integrate all these anomalies into our policy thinking?

Implicit in Shafir's piece is that it is actually possible to think through the consequences of these anomalies for policies. This requires their integration into the current economic policy toolkit of Homo Economicus, and policy directed at correcting market failures. Shafir himself does not undertake to do this, but explicitly calls for it to happen.

It is not just Shafir who can not integrate them. To my knowledge, no-one in this literature has even been remotely able to incorporate a multiple of items on The List into actual modelling or into a blurred overall vision of human choice behaviour. We still cannot do what the classical economists thought too hard to attempt.

If even the leading authors in this field cannot integrate the lessons of the anomalies into mainstream policy advice (and even his list is far shorter than the full one), it should be clear that it is going to be extraordinarily difficult to do. Indeed, I think we should simply admit that it is not going to happen: we are stuck with a fairly unorganised and large set of anomalies which we are never going to be able fully to integrate into a theory that does justice to each of them. Unless we are prepared to simplify The List into a couple of much simpler rules of thumb, it is just too hard to come up with a framework that really makes intellectual sense.

What would be the likely consequences if we were officially to adopt The List as a set of issues that policy needs to take account of?

Suppose we forget about integrating these anomalies into one story, but simply have a checklist of them and we ask of every policy proposal that its proposers have thought about each of them. What happens then, apart from the great expansion in the bureaucracy needed to do it?

Because there would be no overall framework allowing each anomaly to be weighted, having an official list of anomalies would create an immense amount of intellectual discretion. It is easy to find an anomaly to suit your needs and, unlike now, one would not be able to point to a consensus on an overall economic story about which one on The List is important in which situation.

Let me give a simple example from Australia. We had ‘Cyclone Larry’ in Queensland two years ago, which destroyed some of the banana plantations. Now, bananas in Australia are protected from foreign imports under false pretences; that is, under the false pretence that overseas bananas carry diseases that are not in Australia. The reality is that it is a textbook example of a focused domestic rent-seeking cartel that is able to out-muscle consumer interests because of the politically-dispersed nature of consumers (that is, the transaction costs are too high for consumer organisations to mobilise the losers). Yet at least the economic fraternity in this country is fairly united about what is going on and there is a steady attempt by this benevolent élite to undermine the trade protection on bananas, admittedly spectacularly unsuccessful. What would happen if we were to incorporate the list of anomalies seriously into our policy advice? Well, then anything goes. One could rightfully argue that bananas preserve our national identity, or that consumers would suffer from ‘decisional conflict’ if we allowed foreign bananas to come in.

The list of anomalies is basically so extensive, and their relative weight so unclear, that to include them into the economic policy framework is close to suicidal for economics as an ‘avant-garde’ policy science. I would say it would be a monumental mistake to include this list into the official ‘economic policy advice repertoire’.

This is not to say that the list should be ignored, far from it; but the list cannot be officially endorsed as being ‘a reasonable depiction of the truth in most circumstances’. It will have to be the case that particular anomalies have to prove themselves on a case-by-case basis and that it is then ‘business as usual’ unless a particular anomaly is indisputably relevant. The proof of relevance has to be on the part of the anomaly. In many cases, this may be too hard, in which case it would be natural to revert to standard economic thinking. Yet sometimes, proving the

anomaly to be relevant for policy is not as difficult as it may seem. For instance, in the case of savings, there is plenty of evidence that people left to themselves would save too little. However, for the basic political-economy reason above, we can not adopt The List as '*ex ante bona fide*'.

Could we politically sell the incorporation of this list to the voters, politicians, and the media?

On this question, we can be simple and immediate. The need for self esteem that Brennan (2005) reminds us about simply prevents politicians and voters from adopting The List of anomalies officially. Virtually no-one would vote for a 'we are idiots, please save us from ourselves' policy platform. Insofar as policy makers take the list seriously, they also have to do so without telling the electorate about it. They would have to fudge the truth to sound more pleasant; that is, they'd have to say 'we want to help you to save' and not 'you are too stupid to save yourself, so we will do it for you'.

Has our more intimate knowledge of human frailties got us any further than the road set upon by the classical economists?

Anomaly economics has been around for a few decades now, and before that the same issues were talked about in psychology (see the discussion in Frijters (1999) on the state of this field then). The field within economics has really taken off in the last few years. I dare say another twist on another anomaly is 'discovered' in some lab daily and once neuro-science gets fully integrated, I am willing to bet we will find them even faster. A cynic might venture that economists are simply muscling psychologists out of their jobs.

In terms of policy land, it would seem fair to predict that anomaly economics is not going to provide a checklist that could, or should, be used for every policy at present. Rules of thumb have to become transparent before that can happen. Until then, particular anomalies will have to prove themselves in particular areas in order to be taken seriously but should not be taken into the set of 'automatically accepted economic policy advice excuses' because they invite too much discretion.

Yet in other areas of economics, there is less reason for this pessimism. Anomaly economics as an economic basis for psychology may well be very useful inside companies and other organisations simply because of the clarity of thought accompanying them. And since company managers have to deal with individuals, unlike policy makers who deal with the amorphous mass of the whole population, they may well have much more scope for recognising particular anomalies in their

particular employees or clients. In short, anomaly economics may well make excellent company psychologists out of economists.

General discussion

The discussion opened with a question about the optimal number of options offered to individuals when making choices. Professor Shafir, in reply, explained that, while there were no simple rules, the relevant observation from cognitive psychology was that the short term memory can handle seven, plus or minus two, items. In some situations, larger numbers could be reduced by simple filtering questions.

Responding to the same point, Professor Frijters pointed out that, as learning occurs over time, repeated experience with wide choice would stimulate the development of rules of thumb as solutions to decisional conflict.

In further discussion, the following points were made:

- There was a need to take care with words like ‘context’ and ‘irrationality’, to preserve a useful distinction between correctable and non-correctable deviations.
- Many of the insights of behavioural economics are already familiar to organisation and management theorists, while classical economics has persisted with theory that does not always reflect how people behave in the real world.
- One implication of the findings of behavioural economics may be that policy makers should consider randomised policy trials. But both Professor Shafir and Professor Frijters doubted that such experiments would often be possible in the real world of policy and politics.
- Hesitation in entrusting governments with new regulatory domains was understandable, given government’s absolute power. Advocates of ‘benevolent’ paternalism overlook the difference between parents using their own resources on their own children, and governments using their powers (and taxpayers’ money) to influence the behaviour of other people. In response, Professor Shafir considered the first of these to be a typical ‘slippery slope’ argument, and that these arguments are usually weak. Governments make choices every day, and have shown that they are capable of acting up to a point on the ‘slope’ and then stopping.
- It is important to distinguish between what economics actually says about individual decision-making and the popular view of what economics says about individual decision-making. Further, the standard economic account of decision-making under uncertainty already incorporates much now considered

the province of behavioural economics — Gary Becker’s work was cited, as exemplar. The expected utility approach is still the most useful because it is the only theory of decision-making under uncertainty that is simple and robust enough to yield the predictions needed for a policy decision.

Professor Shafir questioned whether traditional economics worked as well as some of the participants in the roundtable were suggesting, and noted that many millions of people in the United States — an economic ‘success’ — were living in poverty without health insurance.

Professor Shafir also took issue with some of the trivial examples being cited, such as choosing from 40 types of coffee. People sometimes do not have the opportunity to formulate rules of thumb for the important decisions they make. ‘People choose houses once. They decide about their retirement savings, at best, once. The important decisions in life are not like lattes ... and in big decisions, which they don’t make thousands of times, they could use help.’

PART B

MOTIVATION AND BEHAVIOUR

3 Motivation crowding theory — a new approach to behaviour

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3.1 Standard theory: the relative price effect

The centre of modern microeconomics is a well-defined theory of human behaviour, often called *homo economicus*. The theory assumes that individuals act rationally (that is, consistently) when they are subject to external constraints. This model provides clear and empirically testable predictions about how individuals react to changes in relative prices, controlling for changes in income. This ‘price effect’ applied to demand implies that a price rise reduces the quantity demanded — the demand curve is negatively sloped. Applied to supply the price effect states that a higher price induces an increase in supply; the supply curve is positively sloped. This also means that paying a higher compensation unequivocally raises the effort and quantity of work.

This simple theory of human behaviour has been extremely successful.¹ What has become known as ‘Economic Imperialism’ (Hirshleifer 1985; Lazear 2000; Stigler 1984), or the ‘rational choice approach’, is mainly due to an application of the price effect to a large number of issues and problems, as pioneered by Gary Becker (1976). The more traditional applications are to education, health, the natural environment and politics; more unorthodox ones are to, for example, the family, the arts, crime, sports, and religion. This imperialism has not been without controversy both inside and outside economics. One of the major points of criticism has been that this theory of behaviour is much too simple to be able to account for human behaviour, especially outside the area dominated by explicit prices (for example,

¹ The empirical application is, however, not always easy especially because all other factors, except the price change, must be controlled for. For small price changes, and when only a small part of total expenditures is spent on the respective goods and services, the income effect can be disregarded because of its small magnitude. This helps to identify the Price Effect.

Lane 1991; Sen 1977). In these applications outside the market, the term ‘price’ is — used in its broad sense as a cost — often difficult to observe, as it takes the form of opportunity cost. As the large literature on the non-market applications demonstrates, a skilful use of the price effect yields fascinating and non-trivial insights.²

Indeed, economic imperialism has had a substantial impact on other social sciences and beyond. In political science, the corresponding field is called ‘public choice’ or ‘political economics’; in sociology, ‘rational choice’, in legal studies, ‘law and economics’; and in historical studies ‘cliometrics’.

3.2 A generalisation: a broader set of motivations

Over the past few years, there has been a dramatic change in how motivation is seen to affect behaviour.³ Based on results originally found in experimental social psychology (Deci 1971), an effect of a price change on behaviour has been identified, which predicts an exactly opposite effect on behaviour to that predicted by the classical price effect. In particular, a price increase is predicted to decrease, rather than increase, the supply of work offered. This is a remarkable result; it goes much beyond the many ‘behavioural anomalies’⁴ that have been identified in other parts of what today constitutes ‘psychology and economics’⁵ (sometimes also called ‘behavioural economics’⁶). This ‘crowding-out effect’ is part of a larger theory that also encompasses neutral and ‘crowding-in’ effects. As will be argued, the crowding effect leads to a generalisation of the relationship between motivation and behaviour; it certainly does not substitute for the price effect. Rather, the price effect is taken to work always in the way suggested by standard theory, but an additional type of motivation is added, *intrinsic motivation*, which, under

² See for example: Frey (1992, 2001); Kirchgaessner (1991); McKenzie and Tullock (1975); Radnitzky and Bernholz (1987).

³ See for example, the papers by Gaechter, Meier, Bohnet, Benz and Oberholzer-Gee, in Frey and Stutzer (2007).

⁴ Such as the endowment, reference point, opportunity cost, anchoring, availability, representativeness, overconfidence effects and biases (for example see, Dawes (1988); Frey and Eichenberger (1994); Kahneman, Slovic and Tversky (1982); Thaler (1992)).

⁵ Important forerunners are: Akerlof (1984); Brennan and Pettit (2004); Frank (1988); Hirschman (1970); Leibenstein (1976); Schelling (1980); Schlicht (1998); Scitovsky (1976). An effort to develop a ‘psychological economics’ independent of neo-classical economics has, for example, been undertaken by Furnham and Lewis (1986) and Lea, Tarpy and Webley (1987).

⁶ This is a misnomer because the ‘behavioural’ school in psychology posits a mechanistic response to outside interventions which is, of course, in clear contrast to what psychological economics stands for.

identifiable conditions leads to dramatically different behavioural responses to price changes.

The crowding-out effect may be illustrated by two examples:

- A boy on good terms with his parents willingly mows the lawn of the family home. His father then offers to pay him money each time he cuts the lawn.

The crowding-out effect suggests that the boy will lose his intrinsic motivation to cut the lawn (he may go on doing so, but now he does it because he is paid). Furthermore, ‘motivational transfer’ effects mean that he will not be prepared to do any type of housework for free.

- You have been invited to your friend’s home for dinner, and he has prepared a wonderful meal. Before you leave, you take out your purse and give your friend an appropriate sum of money.

Probably nobody in his right mind would behave in this way, because virtually everyone knows that this would be the end of the friendship. By paying, the relationship based on benevolence is fundamentally transformed; if it survives at all, it becomes a commercial one. Yet there is one person who would not hesitate to pay his friend for dinner: classical *homo economicus* would do so, following the price effect — and ends up without friends, to his own chagrin.

The two examples indicate that the price effect, on which economics is founded, is not valid under all conditions and circumstances, and that the relationship between a monetary reward offered and supply must be analysed in a wider perspective. The ‘holy cow’ of modern economics needs to be reconsidered. External and, in particular, monetary incentives do not mechanically induce human beings to act in the desired way, because, under identifiable conditions, they crowd out intrinsic motivation. Thus, external and internal incentives are not cumulative, as has been assumed as a matter of course in economics. A more refined model of humans is needed in which behaviour relies to some extent on purely internal considerations, in particular on self-esteem and self-determination.

Section 3.3 develops Crowding Theory, discussing its basis in social psychology, integrating it into economics, and analysing the conditions under which the crowding-out effect takes place. Section 3.4 looks at crowding effects in a particular domain, taxation. Section 3.5 considers spill-over effects to related areas. Conclusions are drawn in section 3.6: both economic theory and policy are strongly affected by the existence of crowding effects. More care should be taken when applying incentive payments in firms, or in the public sector (for example, when following New Public Management ideas), or when using incentive instruments in economic policy (for example, with respect to the environment).

3.3 Crowding theory

Psychological background

Social psychologists have empirically identified that external intervention, in the form of a reward, reduces individuals' intrinsic incentives. This relationship has been variously termed the 'undermining effect', 'overjustification effect', 'the hidden cost of reward' (Lepper and Greene 1978), 'corruption effect' (Kruglanski 1978) or 'cognitive evaluation theory' (Deci and Flaste 1995; Deci and Ryan 1985) by the psychological scholars involved.

The hidden costs of reward rest on the distinction between internal and external motivation:

One is said to be intrinsically motivated to perform an activity when one receives no apparent reward except the activity itself. (Deci 1971, p. 105)

The distinction between intrinsic and extrinsic motivation is not clear-cut. Indeed, it might be claimed that, in the last instance, all motivation comes from outside. On the other hand, what matters, after all, is the inner satisfaction one derives from one's behaviour. While the precise distinction might be important for psychology, for the purpose of explaining economically and socially relevant behaviour, it suffices to distinguish between those activities which people mainly do just because they like them, and other activities which they mainly do because of monetary payment, or because they are ordered to do them. In many cases, the two kinds of motivation go together. What matters in our context is that an identifiable relationship exists between intrinsic and extrinsic motivation.

Three psychological processes have been identified to account for the 'hidden cost of rewards':

1. When individuals perceive the external intervention to be controlling, in the sense of reducing the extent to which they can determine actions by themselves, intrinsic motivation is substituted by extrinsic control. This *loss of self-determination* shifts the locus of control from the inside to the outside of the person affected. Individuals, who are forced to behave in a specific way by outside intervention, would feel 'overjustified' if they maintained their intrinsic motivation. They thus behave rationally when reducing the motivational factor under their control, that is intrinsic motivation.
2. Outside intervention undermines an individual's intrinsic motivation if their intrinsic motivation is not acknowledged. The person affected feels that his or her competence is not appreciated, which leads to impaired self-esteem, resulting in reduced effort. Self-esteem is of central importance for human beings.

-
3. Intrinsic motivation is reduced when a person is deprived of the chance to exhibit this intrinsic motivation to others. Thus, when a host is paid by her guests, the host can no longer show them that she values their company as such. As a reaction, the persons affected exhibit ‘altruistic anger’, and will in turn relinquish the inner motivation, and behave according to external motives.

Social psychology offers a theory that competes with the hidden cost of reward. Equity literature has repeatedly found that increasing pay *increases* productivity and, presumably, intrinsic motivation. In contrast, cognitive evaluation literature has found that increasing pay *decreases* intrinsic motivation and hence, presumably, productivity. It follows, and has been empirically supported, that, depending on the conditions, increased rewards raise or lower intrinsic motivation and, by extension, productivity. The reverse also holds: when inadequate rewards are provided, intrinsic motivation may sometimes *decrease*, and at other times *increase*.

Conditions

The following conditions determine which rewards negatively or positively affect intrinsic motivation:

- External intervention *crowds out* intrinsic motivation, if the individuals affected perceive the intervening individuals to be *controlling*. Self-determination, self-esteem, and the possibility for expression suffer, and the individuals react by reducing their intrinsic motivation in the activity controlled.
- External intervention *crowds in* intrinsic motivation if the individuals concerned perceive it as *supportive* (or informative in a positive way). Self-esteem is fostered, and individuals feel that their self-determination is encouraged which, in turn, raises intrinsic motivation.

Both conditions are formulated in terms of subjective perceptions. Psychologists, however, have gone further, and have identified conditions applying more generally. Thus, the undermining effect is found to be the stronger:

- the more the rewards are expected (unexpected rewards do not crowd out intrinsic motivation, or do so only weakly)
- the more salient the reward
- the more contingent the reward is on the task or on performance
- the more deadlines and threats are used
- the more intensive the surveillance
- the more routine the rewarded work.

Obviously, the hidden costs of reward are only relevant if the persons concerned have some amount of intrinsic motivation. Indeed, intrinsic motivation has been observed to be undermined particularly strongly for those who previously felt highly committed.

With respect to external intervention, psychologists have found that monetary rewards are more undermining than other material rewards. Praise and social approval are more likely to be interpreted as supportive rather than controlling.

Integration into economics

Crowding effects *generalise* the ‘hidden costs of reward’ in three important ways (Frey 1997):

1. Intrinsic motivation is potentially affected by all kinds of intervention coming from outside the person considered. Thus, not only rewards, but also *commands*, may crowd out intrinsic motivation.
2. Intrinsic motivation may be *reduced* or *raised* (crowding-out and crowding-in). Thus, there may not only be hidden ‘costs’ but also hidden ‘gains’.
3. External intervention affects the *internally-held values* of individuals. Hence, they do not only affect narrowly defined intrinsic motivation, but also *norms* internalised by individuals. Moreover, external intervention may induce a shift from other-regarding or group-regarding to *more selfish* preferences and behaviour.

These three generalisations greatly enlarge the scope and applicability of Crowding Theory.

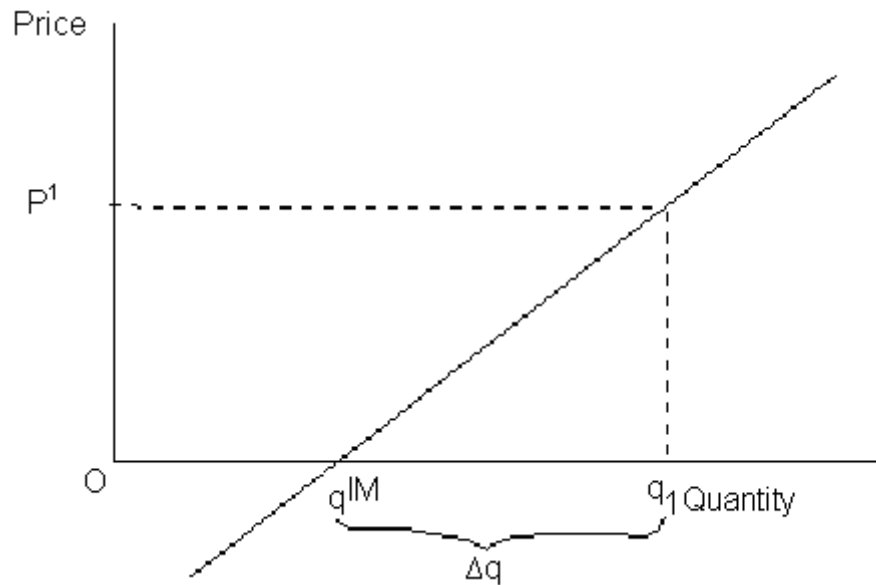
To apply crowding theory to issues dealt with in economics, it is necessary to simultaneously take into account the price effect normally considered in economics. Here, attention is focused on crowding-out, because its effects on behaviour act contrary to the price effect.

Supply falls

Consider a normal, positively-inclined supply function (S in figure 3.1) for an activity. At zero price, the individuals considered are prepared to supply the quantity q^{IM} . That is, to some extent they are assumed to undertake the activity for its own sake, or be intrinsically motivated. Such behaviour is perfectly consistent with economic theory. Following the price effect, conventional economic theory predicts that a price rise (from O to p_1) raises supply from q^{IM} to q_1 , moving along

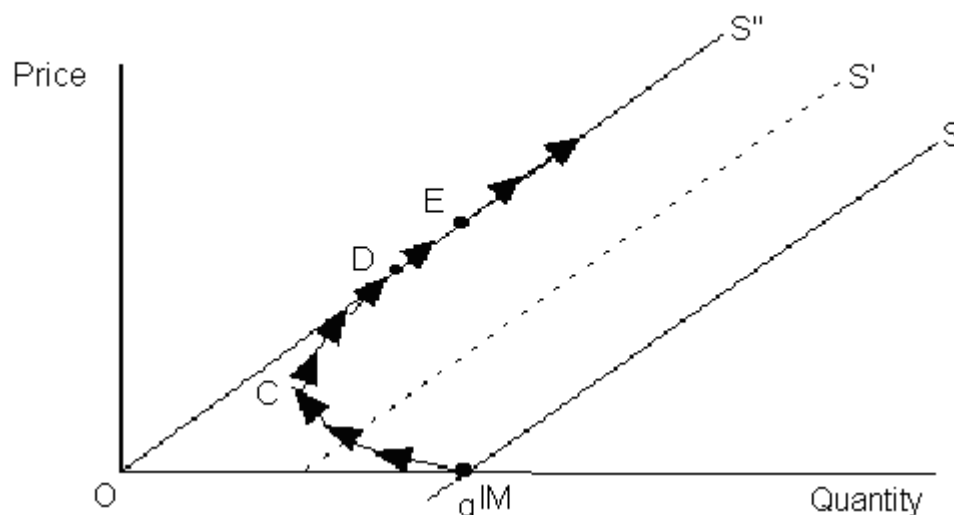
the supply curve. The extrinsically induced supply increase Δq is perfectly *additive* to the intrinsically supplied quantity q^{IM} , thus $q_1 = q^{IM} + \Delta q$.

Figure 3.1 **Conventional supply theory**



In contrast, the crowding-out effect induces a shift in the supply curve to the left (figure 3.2).

Figure 3.2 **Supply including crowding-out effect**



With a positive price offered, the supply curve moves to the left (from S to S'), until intrinsic motivation is completely crowded out (at S''). More precisely, each supply curve is associated with a given stock of intrinsic motivation. Once this stock is

exhausted, or at least constant, supply only moves along S" as the price effect exists.

The supply response is quite different from that suggested by conventional economic theory. In the figure, it is assumed at first that the crowding-out effect prevails over the price effect, and supply *falls*: the individuals concerned reduce the quantity of their activity. Beginning at point C, the price effect dominates. Only when point D is reached does the quantity supplied exceed the amount previously intrinsically supplied. At point D on supply curve S", the stock of intrinsic motivation is constant (and possibly exhausted), so that the price effect exclusively determines supply behaviour.

In stark contrast to the additivity assumption held in conventional economics, intrinsic and extrinsic motivation are *non-additive*. The figures serve merely as illustrations. They refer to only part of the crowding theory. What they do show is that crowding-out is not presented as an alternative to conventional economics, but rather as an extension. Moreover, it should be kept in mind that the crowding-out effect depends on particular conditions. The following propositions on the size of the crowding effect can be formulated, based on insights gained by psychologists. The crowding-out effect is the more pronounced:

- the more personal the relationship between a principal, and his or her agent, the larger the agent's participation possibilities
- the more uniform the external intervention is; that is, the less individual differences in intrinsic motivation are acknowledged by the principal
- the more the external intervention (in particular the rewards extended) are contingent on specific performance, instead of being directed at general behaviour.

Obviously, the crowding effect also has important consequences for policy. Thus, many seemingly 'modern' compensation systems have to be reconsidered. Pay-for-performance schemes negatively affect performance, insofar as they negatively affect work morale, a specific kind of intrinsic motivation. Under certain conditions, for example with volunteers who are essentially intrinsically motivated to work, it may be a mistake to introduce monetary compensation at all.

Supply is transformed

External intervention, in the form of a monetary reward, affects not only the quantity, but especially the *nature* and *quality* of the supply forthcoming. Quite generally, laboratory research indicates that quality tends to be substituted by quantity. Equally well established is the negative effect on incidental learning that

people acquire in complex tasks, because attention is focused on the central task that is rewarded. For tasks that are not well understood, monetary incentives can be dysfunctional, that is they can lead to lower performance. Finally, external rewards have been found to decrease artistic and verbal creativity. These results, observed by psychologists, must be seen in perspective. They only refer to how intrinsic motivation is affected and do not, or insufficiently, consider the more direct incentive effects of monetary compensation on performance. Thus, it has been well established in the study of the economics of culture that artists are able to create masterpieces, even when they are doing so for monetary gain.

In important cases, external intervention via money transforms the nature of a good or relationship even more fundamentally. Sometimes, the offer of a monetary reward completely destroys the existing commodity in question. At the beginning of this chapter, the example of paying a friend for his dinner invitation was given. Romantic love is an equally striking case: it simply cannot be bought, and if an attempt were made to buy it, the good is no longer unselfish love but, taken to the extreme, prostitution. The same is true for trust, admiration or friendliness, which change their intrinsic nature when they are bought. This is the problem of the millionaire woman, who never knows whether her suitors love her, admire her, and are friendly to her because of herself or because of her money. As long as money is involved, the suitors have no means of revealing ‘sincere’, that is intrinsic, love and admiration. Rulers essentially face the same problem. The literature is full of accounts of how such ‘unfortunate’ persons undertake experiments to try to differentiate between the two, usually by pretending to be poor and powerless — sometimes even with success, but (revealingly so) mostly only in fables.

The transformative effect of money on human relationships has been discussed under the term ‘commercialisation effect’. It can vary greatly between historical periods. Thus, for example, from the 16th to the 19th century, the prevailing view in Europe was that the use of prices *improves* behaviour or, in other words, crowds in intrinsic motivation. Montesquieu (1961, p. 81), for example, believed that ‘commerce ... polishes and softens ways of behaviour, as we can see every day’. Thus, the crowding effects have a considerably long history.

3.4 Empirical evidence on crowding theory

Experiments

Social psychologists have extensively studied the hidden costs of reward in the laboratory. There is such a large number of laboratory experiments on the crowding

effect that it is impossible to summarise the results. Fortunately, there have already been no less than five formal meta-analytical studies of crowding theory. The first meta-analyses undertaken essentially support the findings that intrinsic motivation is undermined if the externally-applied rewards are perceived to be controlling by the recipients. This view was challenged on the basis of a meta-analytical study referring to the period 1971–1991. It concluded that the undermining effect is largely ‘a myth’ (Cameron and Pierce 1994). This study attracted a great deal of attention, and many scholars, on that basis, seem to have concluded that no such thing as a crowding-out effect exists.

The most extensive and recent study by Deci, Koestner and Ryan (1999) shows that these conclusions are unwarranted: the crowding-out effect is indeed a robust phenomenon of significant size under the specified conditions. It identifies a number of significant shortcomings and misinterpretations. One is that Cameron and Pierce (1994) omitted nearly 20 per cent of the relevant studies as outliers, used mistaken control groups, and misclassified some of the studies. Another is that they included dull and boring tasks, for which a crowding-out effect cannot occur, as the participants had no intrinsic motivation to begin with. In order to correct these shortcomings, an extensive meta-analysis, including all the previous studies, as well as several studies which appeared since then, was undertaken. The 128 studies analysed span the period 1971–1997. It turns out that tangible rewards undermine intrinsic motivation for interesting tasks (that is, tasks for which the experimental subjects show an intrinsic interest) in a highly significant and very reliable way, and that the effect is moderately large. This holds, in particular, for monetary compensation, which is perceived to be controlling by the experimental subjects, and therefore tends to crowd out intrinsic motivation. The crowding-out effect is stronger with monetary than with symbolic rewards. It is also larger with expected than with unexpected rewards. When the problems at issue are complicated, the negative relationship between reward and performance is stronger than when the problems are simple. In all these cases, it is a requirement that the behaviour was initially perceived to be interesting, and, therefore, intrinsically rewarding. As a consequence, a bonus system usually, but not always, makes employees lose intrinsic interest in the immediate goal, such as serving the customers.

Experimental economic research has also identified various crowding effects on motivation in the economic setting. An increasing number of studies have been published on the subject. Several experiments demonstrate a crowding-out effect on intrinsic motivation in the form of a reduced tendency for reciprocity, that is, toward more narrowly conceived selfish behaviour.

Some experiments have estimated the exact relationship between pay and performance, as displayed in figure 3.2 above. Whenever money was offered, the

standard price effect was observed: that is, a larger amount of money resulted in higher performance. The mere incidence of payment, however, lowered performance in many cases. In these experiments, with all performing the same task, only those groups which received a considerable amount of pay did as well as the groups that worked for free. The evidence suggests that the type of contract, and the (monetary versus non-monetary) work environment, evoke different responses from the agents.

The crowding effects have also been studied in contract enforcement, with respect to the trustworthiness of the participants (Bohnet, Frey and Huck 2000). In an evolutionary game experiment, a first mover relies, to a certain degree, on the trustworthiness of a second mover, because the legal system allows only incomplete contracts. The first mover can either offer a contract, or not play at all, while the second mover has the choice of performing or breaching the contract. The level of contract enforcement is given by the probability of bearing the resulting costs of non-compliance. It was found that low levels of legal enforcement tend to crowd in trustworthiness: the first movers must make careful decisions on whom to enter a contract with, as they cannot rely on the legal system. As a consequence, the second mover is motivated to behave in a trustworthy way. In contrast, when contracts are near-perfectly enforced, there is no observable crowding effect taking place, as first movers enter the contracts because they know that the second movers are deterred from breaching the contract. Personal trust is replaced by institutional trust. With intermediate levels of law enforcement, however, trust is crowded out, as the first movers can neither rely on the second movers' reciprocal behaviour nor on the legal system, resulting in a non-monotonic relationship between trust and the degree of contract enforcement.

Crowding effects have not only been identified in experiments, but also are of great importance for practical, real world problems.

Case studies

Day care centres provide a striking case of monetary intervention achieving the opposite of what would be expected on the basis of the price effect. Such institutions are confronted with the problem that parents sometimes arrive late to pick up their children, which forces the employees to stay after the official closing time. To remedy the situation, economists would typically suggest imposing a monetary fine for collecting children late. Such punishment is expected to induce parents to be on time. A study on a day care centre in Israel revealed a completely different outcome (Gneezy and Rustichini 2000a, 2000b). After the introduction of a rather hefty fine, the number of parents arriving late increased substantially, which is in line with the crowding-out effect. Introducing a monetary fine transforms the

relationship between parents and day care employees from a mostly personal to a more monetary relationship. As a result, the parents' intrinsic motivation to keep to the time schedule was reduced or crowded out altogether, the perception being that the employees were now 'paid' for the disamenity of having to stay longer. Being late for picking children up was no longer associated with any feeling of guilt.

A crowding effect was also identified with respect to performance measurement in the airline industry (Austin and Gittell 1999; Frey and Osterloh 2002). The specific issue was how airline carriers deal with delays and the responsible factors or persons. Attributing a single delay as exactly as possible to its source (as suggested by the principal-agent theory) turned out to be negatively correlated with the achieved end, namely the airline's on-time flight performance. The most successful company was the one that used the general term 'team delay' to indicate the source of a delay caused by the personnel. It thereby crowded in the intrinsic motivation to help out other units and groups, instead of provoking disagreements, finger-pointing and cover-up activities.

Econometric studies

Work motivation is an area where crowding theory is particularly relevant (Frey and Osterloh 2002, 2005; Osterloh 2007; Osterloh and Frey 2000, 2004, 2006; Osterloh, Frey and Frost 2001, 2002). An econometric study (Barkema 1995) looks at firms where the intensity of the personal relationship between the principals and the agents depends on the form of *supervision*. In the case of managers as agents of a certain firm, three major types can be distinguished:

1. The managers are controlled by the parent company. This corresponds to a rather impersonal relationship so that, following our proposition above, a positive influence of monitoring on managers' performance is expected, because intrinsic motivation is little affected or not at all.
2. The managers are controlled by their firm's chief executive officer, which represents a personalised relationship. According to our proposition, monitoring in this case tends to reduce the agents' effort, as external intervention shifts the locus of control toward external preferences, and the agents perceive that their competence is not acknowledged by their superior.
3. The managers' behaviour is regulated by the board of directors. The crowding-out effect is, according to Crowding Theory, expected to be greater than in case (1) but smaller than in case (2).

The data set refers to 116 managers in medium-sized Dutch firms in 1985. They range from between less than 100 to more than 30 000 employees, and cover a wide

variety of industries. The managers' individual effort is operationalised as the number of hours invested. Three aspects capture the intensity of regulating: the regularity with which their performance is evaluated; the degree of formality of the evaluation procedure; and the degree to which the managers are evaluated by well-defined criteria. The results are consistent with the proposition advanced. The econometrically estimated parameters, capturing the effect of external intervention on work performance, turn out to be positive and statistically significant in case (1) of impersonal control. In case (2) of personalised control, on the other hand, the corresponding parameter is statistically significant and negative. This implies that regulating behaviour strongly crowds out intrinsic motivation, so that the net effect of control on performance is counter-productive. In the intermediate case (3) of somewhat personalised control, the estimated parameter does not deviate from zero in a statistically significant way.

Another econometric study looks at the voluntary sector, which is of substantial size in developed economies. Several studies have established that intrinsic motivation is important when it comes to volunteering. A unique data set from Switzerland is used to evaluate how financial rewards for volunteers affect their intrinsic motivation. The incidence of rewards is found to reduce volunteering. While the size of the rewards induces individuals to provide more volunteer work, the mere fact that they receive a payment significantly reduces their work efforts by approximately four hours. The magnitude of these effects is considerable. Evaluated at the median reward paid, volunteers indeed work *less*. These findings have important implications for policy towards volunteer work. Direct incentives may backfire, leading to less volunteering. Even individuals reacting to changes in relative prices, as they are in our data set, may be subject to motivational crowding-out.

We now consider in more depth another important social and economic issue, tax evasion. It will be shown that more intensive political participation possibilities, in the form of popular referenda and initiatives, result in lower tax evasion in the respective political units as intrinsic motivation, in the form of tax morale, is crowded in.

3.5 Crowding effects in taxation

The intrinsic motivation to pay one's taxes — or tax morale — depends strongly on the extent of trust the citizens have in the political system. When individuals are alienated from government, and do not think that they are treated fairly by the political process, they are more inclined to pursue their selfish interests, that is, to evade taxes, only taking into account the expected probability of being punished. A

crucial factor increasing trust in government is the extent to which the citizens can actively participate in the political process (Feld and Frey 2002, 2007; Feld and Tyran 2002; Murphy 2004; Pommerehne and Weck-Hannemann 1996; Torgler 2005, 2007; Torgler and Frey 2007).

Switzerland presents a suitable test case, because the various cantons have different degrees of political participation possibilities. It is hypothesised that the more extended political participation possibilities in the form of citizens' meetings, obligatory and optional referenda and initiatives are, and the broader the respective competencies are, the higher is tax morale and (*ceteris paribus*) tax compliance. In an empirical analysis, a Crowding-In Effect is hypothesised.

On the basis of these characteristics, about one third of the 26 Swiss cantons are classified as pure direct democracy (D), another third as pure representative democracies (R), and the rest satisfy only some of the characteristics. A cross-section time series (for the years 1965, 1970, 1978, that is 78 observations) multiple regression, explaining the part of income not declared Y_{nd} , yields the following results (t-values in parentheses):

$$Y_{nd} = 7.17 - 3.52p - 2.42f + 0.79t - 0.36d - 2.72Y(\ln) + 0.57NY - 1.09A - 7.70D$$

$$(-1.98) \quad (-0.62) \quad (2.10^*) \quad (-2.51^*) \quad (-0.30) \quad (2.98^{**}) \quad (-2.53^*) \quad (3.80^{**})$$

$$R^2(\text{adj.}) = 0.69, \text{ d.f.} = 41, F = 11.08$$

$$Y_{nd} = 8.98 - 3.22p - 2.32f + 0.59t - 0.42d + 1.03Y(\ln) + 0.60NY - 0.82A + 4.02R$$

$$(-1.72) \quad (-0.36) \quad (1.70) \quad (-3.47^{**}) \quad (0.29) \quad (3.07^{**}) \quad (-1.93^*) \quad (2.23)$$

$$R^2(\text{adj.}) = 0.65, \text{ d.f.} = 41, F = 9.43$$

(*) and (**) indicate statistical significance at the 95 per cent and 99 per cent levels, respectively.

The explanatory variables are:

p = probability of detection (the number of individual income tax audits per 1000 tax payers)

f = penalty tax rate

t = mean marginal tax rate

d = income deduction possibilities

Y(ln) = per capita income (in natural log.)

NY = non-wage income

A = old-age taxpayers' share (reflecting experience in tax matters).

The coefficients of the variables indicating the type of democracy (D, R) — the other variables are used to control for other influences — have the theoretically expected signs. In cantons with a high degree of direct political control (D), tax morale is (*ceteris paribus*) higher. The share of income concealed falls short of the mean of the other cantons by 7.7 percentage points or, in absolute terms, the average amount of income concealed is about 1600 Swiss Francs (per taxpayer) less than the mean income concealed in the other cantons. In contrast, in cantons with a low degree of political control typical for more representative cantons (R), tax morale is (*ceteris paribus*) lower. The part of concealed income is four percentage points higher than the average income gap, and the mean income undeclared exceeds the mean of the other cantons by about CHF SFr1500. The estimation results are consistent with the hypothesis that greater democratic participation possibilities lead to higher civic virtue, as reflected in taxpayer behaviour.

The empirical evidence collected for Switzerland suggests the existence of two (extreme) kinds of democratic tax institutions: one is based on the premise that the citizens are responsible persons and that, in principle, they are prepared to contribute to the provision of public goods and the redistribution of income by the state, provided this process is reasonably efficient and fair. The corresponding tax laws allow the citizens to declare their own income and to make generalised deductions. The tax statements are, in principle, accepted as trustworthy, and the tax authority bears the burden of proof if it doubts the declarations. Such a tax system supports a citizen's intrinsic motivations and strengthens his or her normative sense that everyone should carry a fair share of taxation. Tax morale is bolstered and tax evasion is reduced.

The second type of tax institution starts with the assumption that all citizens want to exploit the tax laws to the fullest, and cheat whenever they can. The corresponding tax laws deduct the taxes directly from gross income, and the citizens then reclaim from the government any deductions granted by the tax authorities. In the whole process, the burden of proof always lies with the individual citizen. Such a tax system crowds out intrinsic motivation and the normative notion that all citizens should help in carrying the tax burden. Tax morale is undermined and the citizens make an effort to evade taxes.

3.6 Motivational transfer effect

Remember the example of the boy willingly mowing the lawn that was presented at the beginning of this paper? Being paid by his father does not only crowd out his

intrinsic motivation to cut the grass, but also to do any other housework.

External intervention may thus have an *indirect* damaging effect on intrinsic motivation. The crowding-out effect may spread to further areas, even into those areas where the external intervention has not been applied. If intrinsic motivation is crowded out in areas where it is a major (or even the only) behavioural incentive, the overall outcome of an external intervention tends to be even more strongly against the principal's interest. There may thus be an indirect 'Motivational Transfer Effect', which has to be added to the direct crowding-out effect. A further example is provided by policy instruments, such as effluent charges or tradable permits. They work efficiently where they are applied, but an induced substitution of environmental ethics by monetary incentives may well lead people to protect the environment less in areas where no external incentives exist. This undesired motivation transfer effect not only takes place with monetary incentives, but also with rules and regulations.

That intrinsic motivation (in the broadest sense) may be linked across the board has been observed in several instances. Thus, norms may spread by analogy. If a similarity is perceived between an area in which a norm is valid, and another area where the norm is not yet applied, its validity can expand to the latter area too. The concept of 'attitudinal spillover' and 'reputational spillovers' has been employed in economic contexts. Neurological research suggests that the molecular construction of the brain limits the power to differentiate between varying circumstances, in our case between those areas where external interventions produce overjustification, and areas where a similar type of intrinsic motivation applies, but no external intervention takes place. This is known as the 'spread effect'.

Psychologists have collected considerable direct and indirect empirical evidence for the Motivation Transfer Effect. Intrinsic motivation is taken to transcend areas where the following conditions are met:

- Individuals strive to be consistent with their commitment to a moral principle.
- People are used to returning a favour with a favour, that is, to acting according to the principle of reciprocity. When this attitude is destroyed by a monetary reward, the resulting fall in intrinsic motivation tends to spread to related areas.
- Individuals frequently use the beliefs, attitudes, and actions of others, in particular, those of 'similar others', as a standard of comparison. The loss of intrinsic motivation, due to monetary intervention, tends to crowd out the respective intrinsic motivation of 'similar others'. With tax evasion, for example, 'there is a clear, positive relationship between self-reported evasion and the tax evasion of friends and relatives — that is, "similar others"' (Cialdini 1989, p. 215).

3.7 Conclusions

Crowding Theory introduces a so far disregarded, but crucial, and empirically well-supported, psychological effect into economics. Its integration into economics shows that it certainly does not substitute for the conventional price effect, but that it amends it.

Crowding theory has important implications for economic theory. In particular, a systematic relationship between intrinsic and extrinsic motivation is established; a negative relationship designates the crowding-out effect, a positive relationship the crowding-in effect. Both effects are well-supported by laboratory experiments under carefully controlled conditions. In order to show the relevance for actual social issues, crowding theory has also been applied to pressing policy problems. Crowding-out has been empirically analysed to take place when monetary compensations are offered, as well as in other circumstances pertaining to social and environmental policy. Crowding-in has been identified for the effect of direct citizen participation on tax morale and, more generally, different constitutional settings on citizens' behaviour.

It is important to interpret the crowding theory developed here correctly. Three crucial aspects should be taken into account when considering the relevance of this concept. First, the crowding-out effect works in the *opposite* direction to the price effect. The *net effect* depends on relative size. When crowding-out is small, the qualitative effects predicted by conventional economics hold. If, on the other hand, crowding-out is strong, the price effect may be dominated, and the unconventional effect of an external intervention is to be expected.

As far as I am aware, the crowding-out effect is the only effect systematically working in the opposite direction to the price effect. The many anomalies and paradoxes borrowed from social psychology certainly tend to weaken the effect of any given price change, but they do not reverse it. Thus, crowding theory makes a more far-reaching claim.

The policy consequence is straightforward: *take care not to intervene too much with what individuals want to achieve by themselves. Leave them as they are as much as possible, and give them the chance to follow their intrinsic motivation more fully.* This policy conclusion does not mean that one should exclusively rely on intrinsic motivation and disregard institutional conditions shaping external incentives. Nor should it be assumed that intrinsic motivation is always 'good' and 'socially beneficial'. Historical experience shows that many of the worst crimes in mankind were performed by people who followed inner motives and ideologies. Robespierre and Himmler provide vivid examples that intrinsically motivated people may create great evil. Passions are often uncontrolled and hazardous.

Second, crowding effects depend on *particular conditions*. They do not always take place, and can sometimes be neglected. In particular, when economic relationships are abstract, and when personal contacts are irrelevant, as is the case for the model of a perfectly competitive market, there is no crowding effect. Behaviour is fully determined by relative prices, that is by extrinsic motivation. As traditional economics has focused on such markets (or on markets close to it) to a large extent, it was correct to exclusively consider the relative price effect. However, as soon as one leaves such abstract, impersonal markets, the conditions identified may exist, and intrinsic motivation may be important. Then, it is necessary to carefully consider how far intrinsic motivation is affected by external intervention.

Third, crowding-out effects are due to people's perceptions of being *controlled* by external intervention. The resulting marginal shift in the locus of control from inside to outside the person tends to undermine intrinsic motivation. External intervention can come from a variety of sources, including government. Government intervention, however, need not be connected with a feeling of being controlled. There are certainly programmes which have the opposite effect, that is which *support* intrinsic motivation. In so far as this is the case, morality is crowded-in, and civic virtue, tax morale and other manifestations of intrinsic motivation are strengthened.

In contrast, the price system and, in particular, monetary rewards are often perceived to be a controlling external intervention by individuals, and can, therefore, lead to crowding effects. In particular, the price system is often looked at in this light. Thus, not only government programmes and intervention have the potential to negatively affect morality. The same holds, for instance, for pay-for-performance schemes. As they are defined to be contingent on a particular performance (output), they serve to strengthen external motivation and tend to crowd out work morale.

The social sciences and, in particular, economics should pay more attention to intrinsic motivation as an incentive, and as a viable possibility for policy-making. This applies to current policy, as well as to policy at the level of the constitution. It is an essential task to establish institutions, that is to take constitutional choices, which support individuals' own initiatives.

Discussant — *Mark Harrison*¹

Visiting researcher — Productivity Commission

Frey explains the ‘behavioural anomaly’ of a price rise decreasing the quantity supplied or increasing the quantity demanded.

It certainly is a puzzle. For example, experiments on rats and pigeons show that they respond to the price effect, where price was the number of times they had to push a lever or peck a key to get a unit of food or water. When the reward for effort goes up, pigeons work harder, but their supply curve for labour eventually bends backwards. They act as if maximising a utility function, and different birds have different preferences with respect to tradeoffs between income and leisure (Battalio, Green and Kagel 1981).

Further, 45 years ago, Becker showed that even if all consumers were ‘irrational’ and randomly chose a point on the budget line, the market demand curves would still be downward-sloping (and have a price elasticity of minus one). The shift in the opportunity set as relative prices change creates pressure for the community to respond rationally, even if some consumers increase their demand as price increases. A rise in the relative price of good X shifts opportunities away from X, and consumers as a whole tend to consume less X under a variety of decision rules. Scarcity of resources forces a community of irrational people to respond in the same direction as rational people (Becker 1962).

Frey’s explanation for upward-sloping demand curves and downward-sloping supply curves is that motivation also affects behaviour; and introducing a monetary payment commercialises the transaction and crowds out intrinsic motivation. The relationship between external incentives and behaviour must be analysed in a wider perspective. It seems we are more complicated than pigeons and rats. Frey presents empirical evidence on the importance of intrinsic motivation.

I like the Frey paper. There are two types of behavioural economics — which I will label ‘rational behavioural economics’ and ‘irrational behavioural economics’ (what Frijters calls ‘anomaly economics’). Frey’s paper falls into the rational category. That is, it adopts the traditional economic approach of assuming that people have simple objectives and tend to choose the correct way to achieve them. The rationality assumption is that people choose the correct way. It does not imply that

¹ Discussions with Jonathan Pincus that improved this comment are gratefully acknowledged, as well as comments from Scott Austin and Leanne Holmes.

people use rational analysis (compare the theory of biology built on genes acting rationally — maximising their chances of survival — even though genes can't think). Perhaps a better term than rational behaviour is predictable behaviour.

The rational behavioural economics approach

Some behaviour is inexplicable using standard, simplistic utility functions. The rational behavioural approach explains puzzling behaviour through expanding the domain of what people care about. Frey adds intrinsic motivation to the utility function and uses it to explain, and predict, more behaviour, extending conventional economics. Further, Frey examines crowding-in behaviour and the motivational transfer effect.

This type of behavioural economics is exactly what Gary Becker has been doing for decades: expanding the scope of variables that influence behaviour. For example, purchased goods were traditionally considered the objects of choice that directly enter utility. In Becker's theory of household production, purchased goods and time were inputs into the production of commodities that directly entered preferences (such as health and social standing). This made prices and income (which now incorporate the value of time) explain more differences in behaviour, and relied less on differences in tastes (Becker 1965). For example, advances in medical technology would change expenditures on health care not because tastes were changed, but because the best combination of inputs to achieve good health had changed.

Becker has also broadened the type of considerations that go into models of people's preferences. He points out that traditional economics implicitly assumes that basic biological needs for food, drink, shelter and some recreation determine preferences. But they have little to do with consumption and other activities in modern economies, a significant portion of which takes place publicly (for instance, socialising, eating at restaurants, attending events). A large number of choices depend on past experiences and social forces. Becker extends preferences to include the effects of personal habits, peer pressure, parental influences on the tastes of children, childhood experiences, advertising, love and sympathy, culture and traditions, norms, social structure, the attitudes and behaviour of others, divorce and other neglected influences. Although he has been accused of imperialistically extending economics into other fields, much of his work actually incorporates insights from psychology and sociology into economics, placing them in a rigorous framework.

He incorporates experiences and social forces through two basic capital stocks:

personal capital and social capital. Both are part of human capital and directly influence consumption and utility. They provide a link between current choices and future utility, and Becker uses them to explain habitual behaviour, addiction, social interactions, fashions and fads, and the effect of the economy on preferences. Much behaviour can be explained by these additions to rational analysis, without the need to emphasise cognitive imperfections. Rational behavioural economics is a separate, often ignored, field from anomaly economics. It uses standard tools of economics, but the choices that result are often very different from the choices produced by traditional models of rational behaviour.²

The strengths of the rational behavioural approach

The rational behavioural approach allows us to apply the powerful methods of economics. It provides a positive analysis of behaviour and allows us to better predict outcomes. Extended utility functions can form a stable foundation for welfare analysis. We can do empirical work to determine the strengths of the various effects (as Frey's paper does). It is another tool for the economists' toolbox.

For example, take the market for blood, illustrated in figure 1. Australia has a donor-only system. People are intrinsically motivated by altruism and may even feel better after giving blood. Say this gives a blood supply of Q_0 . The result is a pretty good outcome: donors get benefits and we get a supply of a valuable product.

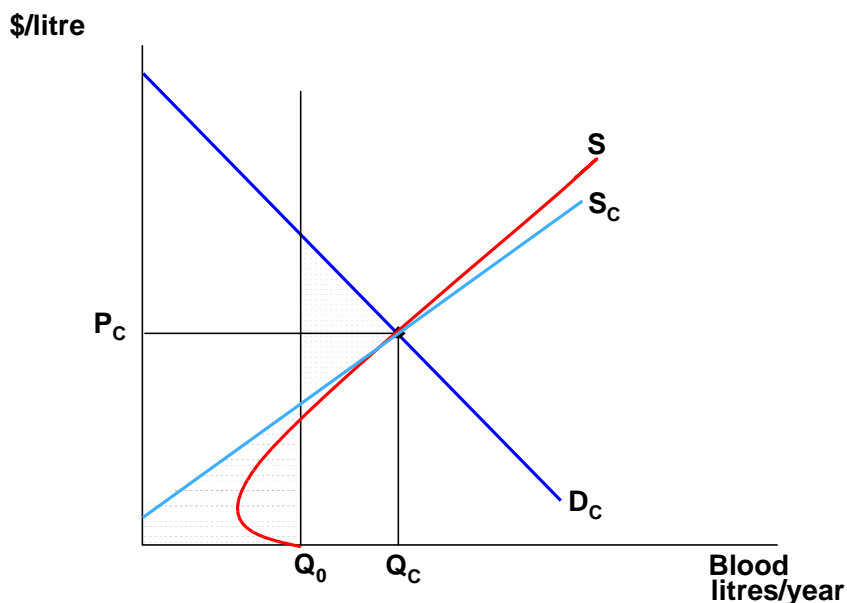
Now introduce a commercial system of payment for blood. Research has found that when people are given a small payment for donating blood, they donate less. A payment turns 'a noble act of charity into a painful way to make a few dollars' (Levitt and Dubner 2005, p. 24). At low prices there is an initial drop in blood supply from donors. This is a bad outcome — we lose the benefits of giving and get less and lower-quality blood. As price increases, intrinsic motivation is crowded out, but commercial supply increases. Eventually the supply curve slopes upwards. The result is the supply curve S (figure 1, drawn the same as Frey's figure 2 — perhaps the initial fall in donations means it should start to the left of Q_0).

Now examine the welfare effects: initial surplus (assuming perfect rationing) is the area under the demand curve up to Q_0 plus any surplus accruing to donors (not shown on diagram). Surplus in a competitive market is the area between the demand and supply curves (we use compensated curves to measure welfare effects). So the net loss from moving from a donor-only to a commercial arrangement is the striped area plus surplus to donors less the shaded area. The net loss could be positive or negative depending on the shapes of the curves. For example, if there was a large

² See Becker (1996); and Becker and Murphy (2000) for collections of papers on these issues.

willingness to pay for more blood, a gain from commercialising blood would be more likely. If supply was inelastic, there is a greater chance of a loss.

Figure B.1 The blood market

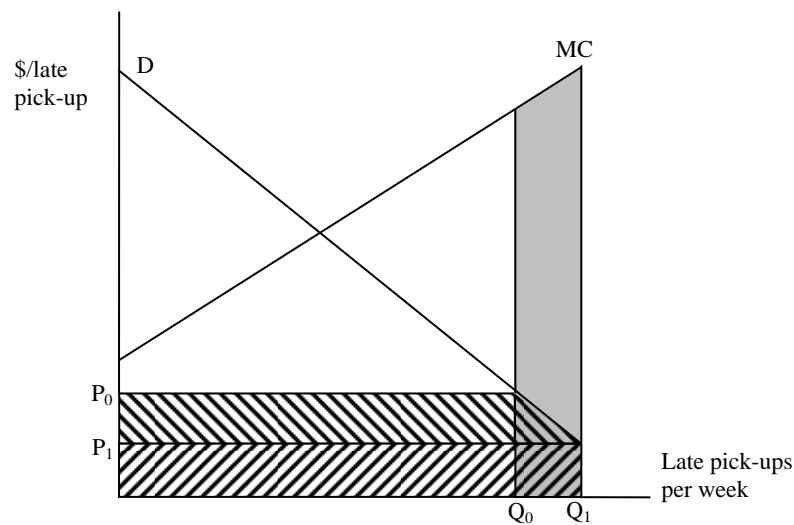


The strength of the rational approach is that you can do this kind of welfare analysis and do empirical work to determine the relative sizes of the areas.

Now look at the welfare economics of the kindergarten example Frey refers to, which is a different case because there is already a commercial arrangement between the parties. If you remember, putting a monetary penalty on late pick-up actually increased the number of late pick-ups (Gneezy and Rustichini 2000b). But the objective is not to minimise the number of late pick-ups but to maximise welfare. Take a simplistic modelling of what has happened: the scheme replaces a non-monetary price (guilt at being late or fear of losing the child-care place) with a monetary price (of \$3 per child for being more than 10 minutes late). Parents saw the fine as a fee for extra child-care and the number of late pick-ups rose. Further, the small size of the fine sent a signal to parents that the cost to the day-care centre of late pick-ups was low. Figure 2 illustrates. Let the initial guilt price be too low (equivalent to a money price of P_0), resulting in an excessive number of late pick-ups (Q_0), which is why we want to institute a penalty to reduce them. But the penalty was set too low (at P_1), below the initial guilt price. As a result, late pick-ups increased to Q_1 . Even though late pick-ups rose, the scheme may improve efficiency. At the lower price, consumer surplus rises by the top striped area. The day-care centre gets the bottom striped rectangle as revenue, but pays the shaded area in extra costs from the additional late pick-ups. The net welfare gain is the

striped minus the shaded area, and could easily be positive. If the price is increased towards the efficient level the net gain increases and must eventually become positive. Further, the child-care centre increases its profits by raising the price to its efficient level, giving it an incentive to set the correct price.

Figure B.2 **The kindergarten late pick-up market**



Policy implications of the rational behavioural economics approach

The rational behavioural economics approach demonstrates that simplistic modelling sometimes does not capture everything that is relevant for a policy issue. That makes the effects of intervention more uncertain and increases the chance of unintended consequences, reducing the case for intervention.

Recognition of the complex nature of behaviour favours market experimentation rather than centralised, ‘one size fits all’ solutions. Take the issue of merit pay for teachers. Merit pay may be a good idea, although only a minority of private schools use explicit merit pay schemes. In a centralised government scheme, school administrators are unlikely to have the incentive to, or even be allowed to, experiment with and adapt different methods of merit pay to encourage good teaching, or abandon it if it is unsuccessful. There are no direct feedback mechanisms to show whether changes improve matters and few incentives to

systematically seek out and keep only beneficial changes. Disastrous changes can survive.

In a market system, open competition between various possible compensation arrangements would determine what is successful and allows for diversity. Schools that offer the most effective compensation systems would do better. School managers would have both the information and incentive to adopt the best scheme for their particular circumstances. Some may eschew merit pay, believing it creates disharmony or that intrinsic motivations are important.

If merit pay for teachers could backfire, schemes for merit pay for pupils could be worse. New York has a plan to pay disadvantaged kids for good school performance. Extrinsic motivators (money) may crowd out intrinsic motivations (such as love of learning). It is true that parents often reward their children for good academic performance. But they have a lifetime involvement with the child, intimate knowledge of the child's abilities and preferences, and the chance to adapt the payment scheme in response to feedback. A government program has none of these features.

We need to compare actual markets with actual government intervention and consider who makes the decisions, what information they possess and what incentives and accountability structures they face. When decision-making is complex, institutions are important.

The irrational behavioural economics approach

Behavioural economics also maintains that bounded rationality and bounded willpower mean that most people do not always act in their own interests: that people are subject to judgement biases and self-control problems. They may have imperfect memories, discount the future excessively, make erroneous calculations, hold mistaken beliefs and be influenced by how questions are framed.

Again, the result is to make policy changes fraught with unexpected consequences. Even well-intentioned policies can backfire. For example, the behavioural economics approach makes sense of arguments that welfare payments can make recipients worse off (Beaulier and Caplan 2002). Standard economics would say that giving the poor the choice of receiving income transfers must make them better off and, indeed, is the best way to help them.

The decision to go, or stay, on welfare may involve an error of judgement. Going on to welfare involves immediate gains and delayed costs. The future costs are easy to underestimate. For example, people may think that they will not like work as much

as they like staying at home, but underestimate how their preferences will adapt once they start work, or how they will advance in their jobs to better-paid and more appealing work. Or they may underestimate the adverse effect of a stint on welfare on an employer's willingness to hire them and on their long-term wage growth. Teenage girls may underestimate the difficulty of raising a child on their own.

Further, there are good empirical reasons to believe that behavioural economics tells us more about welfare recipients than about the rest of the population. Specifically, welfare recipients have more extreme judgemental biases and self-control problems than the general population. People most subject to cognitive and self-control problems are most likely to respond to the perverse incentives of welfare programs. Welfare programs that harm their recipients in the long run will attract those with self-control problems who find the short-term benefits too tempting to turn down, those who most heavily discount the future, and those who overestimate their ability to pursue their long-run interests while on welfare. Even if welfare, on balance, does not harm the recipients, these problems reduce the gains from paying income transfers.

Irrational behaviour adds more cases to the catalogue of market failures. But often these are used as excuses to intervene. The same old laundry list of policy proposals pops up (inevitably including higher taxes), and the proponents seldom specify exactly how they combat the relevant failure. It is not clear whether behavioural economics is a way for economist X to infer citizen Y's true preferences or instead is simply a fancy way for economist X to impose his own preferences on citizen Y.

When people suffer from cognitive imperfections, it is even more important to compare actual markets with feasible alternatives, not imperfect markets with a perfect political process that produces a social-welfare maximising government run by altruistic, all-knowing experts. Governments are not necessarily benevolent or infallible, and studies of actual regulation suggest that much of it is either ineffective or creates bad outcomes.³ This is no surprise as political markets are riddled with the same failures (such as externalities and information problems).

We should not adopt a double standard, but should also consider how government and the political process work when voters are irrational. That is, we need a theory of behavioural public choice. Glaser points out that:

... bounded rationality will often increase the costs of government decision-making relative to private decision-making, because consumers have better incentives to overcome errors than government decision makers, consumers have stronger incentives

³ Winston (2006) reviews thirty years of US empirical evidence on the efficacy of market failure policies. He finds that the welfare cost of government failure may be considerably greater than that of market failure.

to choose well when they are purchasing than when they are voting, and it is more costly to change the beliefs of millions of consumers than a handful of bureaucrats. As such, recognising the limits of human cognition may strengthen the case for limited government. (Glaeser 2006, p. 134)

Errors are frequent in political markets, and more difficult to correct.

Although people may sometimes misjudge their own welfare, sometimes in predictable ways, at least they can be trusted to give their own welfare a high priority. By contrast, political decision-makers have their own interests. It is difficult to design appropriate policies that are not open to capture by special interest groups.

To the extent that the political process is not hijacked by special interest minorities, but instead reflects community opinion, the problem is that voters consist of the same people considered too irrational to run their own lives. Why would they make better decisions on whom to vote for, especially when the benefit to them from acquiring information on political issues is so low?

Would there be any political pressure for paternalistic policies? Why would people vote for policies they reject when making choices over similar issues in their own lives?

Caplan argues that there is a demand for irrationality (for example, to be part of a group or to satisfy emotional and ideological preferences) and irrationality is more likely in the political process because the private cost of holding irrational political views is zero (Caplan 2007; Caplan and Stringham 2004). A market process has prices to convey effective knowledge of inherent constraints, the political process does not (Sowell 1980, p. 119). There is nothing to ensure that the bundle of promises made by politicians or the demands of voters are consistent, accurate or feasible.

Moreover, several behavioural biases may plague regulators, including overconfidence, self-serving bias, framing effects, and groupthink.⁴ As blogger Jane Galt summarises:

1. People are often stupid.
2. Bureaucrats are the same stupid people, with bad incentives.⁵

⁴ See Choi and Pritchard (2003) for an examination of behavioural biases with the Securities and Exchange Commission.

⁵ <http://www.janegalt.net/archives/009649.html>. The answer to the question 'Who is Jane Galt?', is Megan McArdle.

General discussion

The first commentator from the floor offered examples of the working of intrinsic motivation in the nonprofit sector of the Australian economy: the first in plasma donation, where reward was presented as compensation for costs incurred by donors; the second in domiciliary care, where motivation is preserved by offering respite care. Professor Frey agreed that they were good examples of the points made in his paper. He also acknowledged the strength of Mark Harrison's welfare analysis of blood donation in illustrating that the net outcome of crowding out might be to increase or decrease welfare. But this would be difficult to tell especially where there are motivational transfer effects on other activities. Professor Frey also acknowledged Mark Harrison's point about fallible government decision makers:

Politicians are no better than we are. That is the basis of [behavioural] public choice.

Professor Shafir later replied that he saw:

... no paradox in saying individuals are confused [but] governments and other organisations ... are less confused, when they have the data, the knowledge and the time to think about it.

Professor Frey was asked first, why questions of intrinsic and extrinsic motivation have taken so long to enter the economics literature, and, second, where intrinsic motivation is extinguished, how it can be restored?

He replied that the fundamentals of neoclassical economics are so well established and so widely used that any change will take time. He suggested that while it might be difficult to restore intrinsic motivation, it may well reappear in less familiar forms. Where trust and intrinsic motivation are important, care should be taken about intervening in the first place.

Succeeding speakers drew attention to the 'catch-all' nature of welfare analysis, and the indefinite extension of its realm by the indiscriminate addition of new insights.

One speaker noted that most economists would be very comfortable with Professor Frey's paper, as he was pointing out situations where there is a discontinuity in preferences — a proposition that classical welfare economics is equipped to deal with. By contrast, Professor Shafir had asked 'what happens if you can't use welfare functions at all?'

Mark Harrison defended the classical approach to welfare economics, noting that the Beckerian analysis he had discussed in his paper was a different, if underappreciated, form of behavioural economics, using sociological insights rather than psychological. A strength of the rational approach is that it uses the standard tools of economics, which allows us to do welfare analysis.

Professor Frey intervened here to argue that traditional welfare economics is now totally dead, that we can better judge the effects of a policy change by evaluating how people like it, advocating, in short, a switch to ‘happiness economics’.

Professor Shafir contrasted the neatness of theory with the messiness of psychology, counselling that in the end, fidelity to the data counted most — ‘Don’t ignore the data!’. He also observed, however, that data can prove a source of tension. For example, (being faithful to the data) measures of happiness, or life satisfaction, if taken seriously, would mean that we had little reason to help the Third World, ‘because people in countries ravaged with famine and genocide, according to some of the obtained measures, are almost as happy as we are’.

One question addressed Professor Frey’s comments about the difficulties caused by performance-related pay for intrinsic motivation. It was suggested that the perennial principal-agent problem is still best addressed by appropriately-structured pay and incentives based on performance. If the problems outlined by Professor Frey were real and acute, a trend toward flat or fixed wages should by now have been apparent in the private sector. Professor Frey, in responding, claimed that there was no empirical relationship between performance pay and company performance, and noted that Michael Jensen, one of the authors of the concept of performance pay, now described it as ‘managerial heroin’.

PART C

BEHAVIOURAL ECONOMICS AND CONSUMER POLICY

4 Behavioural economics and the Federal Trade Commission

*Joseph P. Mulholland*¹

4.1 Introduction

My aim in this paper is to discuss behavioural economics from the perspective of the US Federal Trade Commission (FTC) — past, present, and future. My presentation proceeds in four parts:

- The first part provides a brief description of the legal and economics basis of consumer protection policy at the FTC, and how it fits into the larger consumer protection field. A key point here is the consumer choice orientation of the Commission’s mission, which stems from its dual role as antitrust enforcer as well as the absence of direct authority over price and product quality.
- The second part describes the decision making process at the FTC and how it relates to the behavioural economics approach. My focus will be on advertising and fraud regulation, the areas where I have the most knowledge and experience. It turns out that the Commission has been doing a good deal of behavioural economics — if the term is considered broadly to encompass the reliance on the boundedness of consumer behaviour due to cognitive and emotional shortcomings — albeit using different terminology. But there are also a number of differences that go beyond semantics where behavioural economics can offer unique insights into the consumer protection task.
- The third part summarises the recent FTC conference on behavioural economics that I helped organise. Our aim was quite similar to that of the Productivity Commission, in that we sought to determine the ways in which behavioural economics can help in the development and enforcement of consumer protection policy.

¹ Thanks to Matt McDonald for his excellent research assistance. Although portions of this paper were written while I was staff economist at the Federal Trade Commission, the views expressed are my own and do not necessarily reflect those of the Commission or its staff.

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- In the final section I discuss a number of policy areas where the utilisation of both conventional and behavioural economics can prove useful.

My views on the policy role of behavioural economics can be summarised in the form of answers to the two questions posed by Gary Banks for this conference: to what extent can the behavioural approach, first, help achieve existing goals more efficiently; and, second, be used to support or justify a particular policy goal?

I think the principal value of behavioural economics to consumer protection lies in its ability to help in the more efficient implementation of *existing* policy goals. In particular, psychological insights derived from experimental and field research can be of significant help in communicating with consumers in ways that recognise their cognitive and emotional constraints. This is particularly the case for the various information policies that form the basis of consumer protection policy at the FTC and other agencies. While we know a lot about how consumers perceive various kinds of information, we are less confident in understanding how these perceptions are acted upon in real-world markets. Behavioural economics, with its focus on individual decision making, can help close this gap.

I am, however, quite sceptical about the value of behavioural economics in formulating goals for consumer protection policy. This is especially so in regard to the generation of new government interventions that could not be justified on the basis of conventional economics. I think that the behavioural economics literature actually cautions against the use of paternalistic interventions by illustrating the variety of behavioural patterns that exist, which make it difficult to rely on psychology to identify with confidence what consumers prefer and how they will respond to regulatory interventions.

4.2 Consumer protection at the Federal Trade Commission: the basics

Jurisdiction

The FTC's jurisdiction is a broad one, allowing the agency to challenge practices such as fraud, deceptive advertising, unilateral breach of contract, and unauthorised billing. It also enforces a number of laws legislated by Congress, including credit, privacy, and 'do not call'. The FTC is part of a much larger consumer protection apparatus, which includes a number of independent as well as executive branch agencies. The division of responsibilities is grounded both in subject matter, differences and specialisation, as well as in history. Several other US agencies

(such as the Department of Justice, Federal Bureau of Investigation, US Customs Service, US Postal Inspection Service, and the Secret Service) have law enforcement authority — including criminal law enforcement authority — over matters relating to consumer protection. In addition, all 50 US states have their own versions of the FTC Act, and have their own important consumer protection policy and law enforcement authority.

One rough line dividing where the agency's consumer protection jurisdiction ends and other agencies take over is the fact that the FTC does not have authority to directly set the price, availability, and characteristics of goods and services. Thus, for example, the Commission jointly regulates the advertising of prescription drugs with the Food and Drug Administration (FDA), but the FDA controls the kinds of drugs that will be allowed on the market. Similarly, the FTC has oversight over the way tyres are promoted, but the Department of Transportation specifies the minimum safety standards for tyres.

This limited authority, along with the FTC's joint competition enforcement role, no doubt has influenced its focus on enhancing consumer choice as the dominant consumer protection policy. Without control over price and product quality, it becomes easier to avoid reaching for the more direct form of regulation utilised by other agencies. As will be discussed, the Commission does have indirect ways to come to the same end, and clearly does influence both price and quality in the market. But for the most part it has focused on developing the kinds of competitive environments where output and price are instead determined by market processes. In a nutshell, its policies are based on the notion that competition among producers coupled with accurate information for consumers will result in the best products at the lowest prices.

Enforcement approaches

Enforcement entails both administrative actions against individual firms and the use of industry-wide rules. Once the Commission has promulgated a rule, anyone who violates the rule with 'actual knowledge' or knowledge implied by the circumstances, is liable for civil penalties of up to US\$11 000 per violation. FTC rules are extensive, but their genesis and degree of economic input have varied widely over time and can be roughly characterised by the following three stages:

- Prior to the mid 1970s, rulemaking was very *ad hoc* and often based on little evidence and even less economics.
- The pendulum swung very much the other way during the 1970s, when there were extensive proceedings and a good deal of evidence presented. Input expanded in part due to the specifications of the Magnuson-Moss law which set

out extensive guidelines for the rulemaking process. Many of the rulemakings from the 1970s and early 1980s were very time-consuming exercises that generated extensive formal ‘records’, but relatively little systematic evidence regarding the problem to be solved or the best way to solve it. As a result of the cumbersomeness of the rulemaking process (combined with the belief that many of the rules could not pass a cost–benefit test), many of the large rulemakings were abandoned or scaled back in the early 1980s.² One important exception was the Credit Practices Rule (FTC 1984), which was explicitly based on an economics cost–benefit test.

- The current phase started in the 1990s and involves a more streamlined approach where Congress passes a law and directs the FTC to devise a rule to enforce it. There is still the semblance of a cost–benefit analysis, but it is constrained by the general framework of the rule set out in the legislation that created it. The bulk of the evidence analysed is generated by outside parties. Among the rules developed in this way are the Truth in Lending Act, Equal Credit Opportunity Act, Fair Credit Reporting Act, Fair Debt Collection Practices Act, CAN SPAM Act, the Children’s Online Privacy Protection Act, the financial privacy provisions of the Gramm-Leach-Bliley Act, the Telemarketing and Consumer Fraud and Abuse Prevention Act, including the Telemarketing Sales Rule and the Do Not Call Registry.³

Current FTC activity

Since the mid 1990s, there has been an increased emphasis on fraud cases along with a corresponding drop in actions against national advertisers. There has also been an expansion of the FTC’s authority into a number of new areas spawned by new technologies and fuelled mostly by Congressional legislation. The Commission’s consumer protection focus on promoting informed decision-making by consumers is also reflected in its advocacy interventions before both federal agencies such as the FDA (commenting on the agency’s advertising policies) and state legislatures (for example, commenting on regulations of professions that affect the information available to consumers via advertising and other marketing activities). All of these activities, to varying degrees, are motivated and guided by the deception and unfairness doctrines that underlie the FTC’s consumer protection authority (see below).

² For a general description of the rulemaking period, see Meiners and Yandle eds. (1989, pp. 71-88).

³ See <http://www.ftc.gov/ogc/stat3.htm> for a complete list and summaries.

4.3 Behavioural analysis at the FTC

Although behavioural economics is not explicitly utilised at the FTC, there is a long tradition of formulating policy that recognises various cognitive and emotional limitations of consumers. This is not surprising since the very nature of consumer protection, viewed as a complement to and not a substitute for competition policy, must be based on a premise that consumers sometimes need assistance in making purchase decisions — even in fully competitive markets. The result has been an inevitable mix of approaches that encompass both the use of traditional economic techniques where the consumer is modelled as behaving as a consistent utility maximiser, and more psychological views where the consumer behaves in ways that are not as easy to describe or predict.

Until the 1970s, consumer protection policy at the FTC paid little attention to economic or behavioural theory in its advertising enforcement, using instead a very expansive interpretation of a misleading advertisement as one that included any statement that had the tendency and capacity to mislead or deceive a prospective purchaser — including the ‘ignorant, unthinking, and credulous’.⁴ This led to the bringing of a number of relatively trivial cases targeting claims that were unlikely to mislead the majority of consumers. Targeted suspects included Indian trinkets that were not made by American Indians and automatic sewing machines that did not operate by themselves. The agency’s low assessment of consumers’ cognitive abilities was also reflected in its hostility toward comparative advertising, which ignored the potential of such advertisements to both inform consumers and stimulate competition.⁵

The 1970s saw a shift toward a more nuanced view of the consumer, from both economic and behaviouralist perspectives. Developments in the economics of information led to a more relevant economic theory in which consumers were modelled as bounded by the various costs of acquiring and processing information. The information economics approach did not supplant the neoclassical model, but rather extended it to include an explicit analysis of how information influences the behaviour of both buyers and sellers. In this formulation, consumers make consistent decisions that enhance their welfare, but do so under constraints that lead them to acquire less than full information. Instead of being endowed with perfect

⁴ *Floresheim v. Weinburger*, 346 F. Supp 950, 957 (D.D.C. 1972) (citing *Florence Mfg. Co. v. J.C. Dowd & Co.*, 178 F. 73, 75 (2d Cir. 1910)). *U.S. v. ‘Sudden Change’* at 741.; *U.S. v. Article Consisting of 216 Cartoned Bottle ... ‘Sudden Change’*, 409 F.2d 734 (2d Cir. 1969).

⁵ Describing this period, former Commissioner Pitofsky observed that the FTC acted as a surrogate enforcement arm for competitors. Many enforcement actions against advertisers grew directly out of competitor complaints and appear to have been primarily intended to protect sellers against competition from cheaper substitutes (Pitofsky 1977).

information, they are boundedly rational entities who acquire information up to the point where the marginal benefit equals the marginal cost. The behaviour of firms is similarly influenced by the costs of both acquiring and disseminating information.⁶

One key component of the economics approach is the role played by advertising in providing information to consumers. While the negative effects of false and deceptive advertisements have always been apparent, important theoretical and empirical research has demonstrated the various ways that advertising can inform consumers on the products and services they wish to purchase. This information role goes well beyond the (very important) function of describing the price, location and physical characteristics of goods. For example, research conducted at the FTC and elsewhere has demonstrated that truthful health and safety claims by producers in their advertising has transmitted important information to consumers.⁷ Also, consumers at times create rules of thumb or ‘heuristics’ based on the level and placement of a product’s advertising as a means of inferring quality in situations where direct evaluation is not possible.

Starting in the 1970s, the FTC began to utilise insights from the marketing literature on consumer research, which in turn was heavily influenced by developments in cognitive and social psychology.⁸ The combined use of economics and marketing tools in the application of consumer protection policy is illustrated in Beales et al. (1981), which used psychological research to show how consumers’ cognitive abilities and previous experiences influence their information-processing capabilities. Also relevant in this regard was the start-up of the *Journal of Public Policy and Marketing* in the 1980s, an academic marketing journal that regularly includes a significant number of articles (many written by current or former FTC professionals) that report on the relevance of behavioural research for consumer policy.

The end product of these developments is the present eclectic mix of economic theory and behavioural research at the FTC that shares important similarities with the behavioural economics paradigm, but also reveals important differences as well. In the remainder of this paper I describe the analytic approach used at the FTC using the behavioural economics paradigm as a frame of reference. I will focus on the regulation of advertising, considered in its broader sense to include public policy issues such as the agency’s views on advertising and disclosure regulations of other Federal agencies (for example, the FDA and the Department of Housing and Urban Development).

⁶ See Schwartz and Wilde (1979), Ippolito (1984), and Rubin (2004).

⁷ See Ippolito (2004) and the references cited therein.

⁸ See Ippolito (2004) and the references cited therein.

Decision-making models: unfairness versus ‘asymmetric paternalism’

The decision-making process at the FTC revolves around its deception and unfairness authority, as provided in Section 5(a)(1) of the *Federal Trade Commission Act*:

Unfair methods of competition in or affecting commerce, and unfair or deceptive acts or practices in or affecting commerce, are hereby declared unlawful.
(15 U.S.C. § 45(a)(1))

Both deception and unfairness have important behavioural components that have changed over time in response to analytic and research developments — and to political considerations. Deception focuses on false and misleading claims, while unfairness is a broader concept that extends the FTC’s reach to acts and practices that cause consumer injury without necessarily being false or misleading. Unfairness is thus the more general concept with deception being a subset. It provides a generalised cost–benefit standard for evaluating whether a particular intervention will generate net benefits to consumers.⁹

An unfair act or practice is defined as one that:

- imposes significant injury on consumers
- is without offsetting benefits
- cannot be reasonably avoided by consumers.

These conditions are used to identify market failure situations in which the benefits of government action are greater than their associated costs. Satisfaction of the first two conditions can be interpreted as ensuring that the act or practice in question results in a more than trivial cost to consumers and that this cost is not offset by the benefits it delivers to consumers — with both factors being interpreted in the context of the particular remedy being proposed. The ‘reasonable avoidance’ condition influences both cost and benefit calculations by addressing the ability of consumers to take due precaution to avoid injury.¹⁰

Advertising deception cases often focus on what is considered ‘reasonable’ behaviour by consumers. The Commission considers the claims consumers receive

⁹ Deception is in effect a streamlined operational rule (‘heuristic’) where the presumption of injury from a deceptive ad avoids the necessity of an extensive rule of reason analysis. This undoubtedly helps in the prosecution of advertising cases, but the reality is that something akin to the unfairness test is used to select which cases to bring. While an extensive cost–benefit analysis is not normally used, staff will at times evaluate extrinsic evidence such as copy tests to identify the extent of injury as well as the feasibility of possible remedies.

¹⁰ See Beales (2003) for a description and history of the unfairness doctrine at the FTC.

from an advertisement, judged in the context of the advertisement and background information. In that sense, the policy incorporates behavioural problems consumers might have in a particular circumstance. Often the advertisement claims being evaluated are not expressly false statements, but rather implied ones where an important task is to determine the message actually received by consumers. Another complication occurs when consumers vary in the kinds of messages they take from an advertisement, as well as the importance they attach to the claims that they do receive. For any particular claim, whether express or implied, there is the further task of determining whether the advertiser has a sufficient level of substantiation consistent with the claim being made.

For instance, the Commission might find an advertisement deceptive if the advertisement frames the claim in a way that misleads substantial numbers of consumers on a material issue. Similarly, if copy tests show that a significant percentage of consumers misunderstand claims about particular types of risk or intertemporal issues, the Commission might require more from the firms making claims on those issues to avoid the deception.

Consumer testing, typically via controlled copy tests, is often used to assess the claims that consumers take away from an advertisement when the claim is not reasonably obvious in the advertisement. It is a behavioural test not influenced by economic theory in the sense that if consumers looking at an advertisement take a claim from that advertisement, that would be the basis for a case. The test would not be whether that was a reasonable interpretation of the advertisement, but rather whether the interpretation was there. Thus the ‘ignorant, unthinking, and credulous’ standard is not completely eliminated, but rather comes back under a more empirical definition of what is reasonable. But even in such situations there remains the more general cost–benefit conditions under the unfairness test to satisfy.

The ‘asymmetric paternalism’ test set out in Camerer et al. (2003) has many similarities to the unfairness one. A regulation inspired by behavioural theory is asymmetrically paternalistic ‘if it creates large benefits for those who make errors, while imposing little or no harm on those who are fully rational’ (Camerer et al. 2003, p. 1212). The authors argue that regulations are desirable only when they are asymmetrically paternalistic — total social welfare is increased, even though fully rational consumers and producers may be hurt. The authors thus embrace cost–benefit analysis as a method of determining the desirability of paternalistic regulations, concluding that ‘a richer sense of the costs and benefits of regulation on individual market actors is a necessary step in the design of proper regulatory mechanisms’ (Camerer et al. 2003, p. 1251). They review potential regulations such as default rules, framing issues, cooling-off periods, and limiting consumer choice, and describe circumstances under which each regulation may be

asymmetrically paternalistic.

The obvious similarity to the unfairness test is the use of empirical analysis to ensure that a proposed intervention will generate more benefits than costs. One contribution of the asymmetric paternalism concept is the explicit recognition that the benefits and costs of regulations will tend to fall differently among consumers, conferring benefits on some while imposing costs on others. This provides a useful framework for analysing regulations by sorting out the winners and losers according to their decision making acumen. Such an analysis is implicit in the FTC formulation, especially when the agency focuses on the harm a particular practice may impose on 'vulnerable' consumers. Nevertheless, the asymmetric paternalism concept can be helpful in the use of a more systematic way of analysing the cognitive differences among consumer groups and their regulatory consequences.

Although Camerer et al. (2003) discuss the asymmetric paternalism cost-benefit calculus at length, they do not provide examples of how the test would actually work in the consumer protection area. This is because their examples of regulations justifying the asymmetric paternalism standard are dominated by those the authors view as imposing little or no cost on the more informed and sophisticated consumers. In addition, most of the consumer protection examples consist of existing regulations that were not originally justified by insights from the behavioural economics literature. These include cooling-off rules and mandated disclosures such as the ones required under the Federal Truth in Lending Act. The problem is that many of these type of regulations were not evaluated by a cost-benefit standard before enactment, and a number of disclosures have been shown to be ineffective or at times harmful to consumers in retrospective studies.

Camerer et al. (2003) also tend to oversimplify the cost-benefit calculation by assuming that the costs of an intervention fall only on the sophisticated and not on the cognitively-impaired consumers that the regulation is presumably designed to help. But the 'Law of Unintended Consequences' often rules in these situations, so that the intended beneficiaries of a regulation can end up being harmed by it. Thus the empirical question to be answered is more than 'whether the benefits of mistake prevention are larger than the harms imposed on rational people' (Camerer et al. 2003, p. 1254). Indeed it may be the case that a mandated disclosure policy will have greater beneficial effects on the sophisticated consumer than on one who does not bother to read the product information. In such situations, the uninformed consumer turns out to be the loser if the effect of the enhanced disclosure is to immunise the seller from legal action (Hillman 2006). Such an effect is at this point largely speculation because an important but largely unexplored aspect of mandated disclosures concerns the type of consumer who actually uses them.

A useful framework that incorporates the potential costs of regulatory actions such as those envisioned by Camerer et al. (2003) is the net error analysis used in the evaluation of advertising deception cases (Rubin 2004). Borrowing terms from statistical decision theory, the task of the regulator is to compare the costs associated with letting a possibly deceptive advertisement continue (type 1) to the costs of mistakenly stopping an informative one (type 2). Viewed in this way, the appropriate objective of the regulator is to minimise the expected costs associated with both kinds of error, not to eliminate one kind of error completely.

This analytical framework can be usefully employed to analyse the costs of mandated disclosures that are linked to the limited attention span of consumers and thus their ability to process information. Specifically, mandated disclosures usually add to the amount of information already contained in an advertisement or contract document, thus raising the potential for the new information to crowd out or dilute existing messages that may be of use to the consumer.

In the case of a disclosure linked to an advertisement, the firm may react by reducing the number and content of the advertisements and thus reducing the information provided to consumers in them. Increasing the prominence of a required disclosure may also reduce the attention consumers pay to other information, conceivably leading to worse decisions rather than better ones. Survey research by Lacko and Pappalardo (2004) illustrates this kind of effect in the case of mortgage disclosures. Similarly, the field experiment reported in Bertrand et al. (2005) showed how some formats appear to direct a consumer's attention to the interest rate information, while others (for example, lottery and cell phone offers) have the opposite effect.

The cost–benefit calculus required of the regulator in the case of mandated disclosures is well described in Craswell (2006, p. 24):

... the disclosures that produce the least amount of interference are those that are the least prominent, and therefore the least selective in communicating the disclosed information. Conversely, more prominent disclosures are more likely to be more selective at conveying their own information, but these are also the ones most likely to interfere with something else. Of course, which course is preferable overall depends on the importance of the information being disclosed, the importance of the information that is interfered with, and the actual extent of that interference. In this respect, too, designing a disclosure format requires close attention to the relevant costs and benefits.

Empirical research

Behavioural research at the FTC relies heavily on the use of surveys to identify how consumers perceive information. The chief instrument used is the 'copy test' in

which consumers are shown hypothetical or actual advertisements in order to identify the types of messages they take away from them. Copy tests are used to identify the kinds of claims being made in an advertisement, to evaluate the effectiveness of proposed wording designed to qualify an advertised claim, and to test the effectiveness of proposed disclosures to be mandated in an advertisement or in other marketing documents.

In contrast to copy tests used by firms, where the focus is on determining whether a particular advertisement will generate sales, the typical FTC copy test is designed to identify the way consumers perceive the information provided in a document and not to test directly whether this perception will lead to actual purchases. This is particularly so in the case of deception cases where the finding that an advertisement conveys a particular misleading claim is sufficient to infer materiality and thus a Section 5 violation.

The copy test research approach is also used to evaluate the ability of advertisements to accurately describe the level of scientific support attached to health claims for a particular product. Results of research conducted by Dennis Murphy and others at the FTC indicate that consumers can distinguish between claims that are qualified to convey differing levels of scientific certainty — although the ability to qualify claims where the science is relatively weak is more problematic. This research is used in the formulation of remedies in FTC advertisement cases and is also used to advise the FDA concerning the degree to which health claims can be made for supplements and other products regulated by the agency.

An especially active area of copy test research at the moment involves the testing of proposed mandated disclosures in credit documents. The most recent effort is Lacko and Pappalardo (2007), which tested 800 mortgage customers (along with 36 in-depth interviews), to examine how consumers search for mortgages, how well consumers understand current mortgage cost disclosures and the terms of their own recently-obtained loans, and whether better disclosures could improve consumer understanding of mortgage costs, consumer shopping for mortgage loans, and consumers' ability to avoid deceptive lending practices.

Both the FTC survey approach and the psychological experiments highlighted in the behavioural economics literature attempt to shed light on consumer behaviour in ways that are not tied to standard economic theory. The lack of a theoretical base is perhaps most pronounced in the FTC approach where the focus is on determining the messages conveyed by advertisement copy chosen for its connection to a particular case, a regulation, or its likelihood to convey a particular message to the consumer. In contrast, many experiments involving tests of specific hypotheses are generated from the psychological literature.

The FTC survey method also shares with behavioural economics a lack of external validity. Just as the results of laboratory experiments (often using college students as subjects) cannot be confidently extrapolated to real-world situations, copy test results are rarely linked to actual decision-making. While the FTC tests tend to use subjects that are closer to the market place (shoppers in advertisement copy tests, recent mortgage customers in the Lacko and Pappalardo (2007) research) than do psychological experiments, they do not examine actual decisions — only how the subjects perceive the information presented to them.

Alternatively, the survey and experimental approaches both have the advantage of being able to focus on particular aspects of consumer behaviour in ways that are difficult to achieve through the analysis of market based data. One promising technique to bring more reality to both approaches is the field experiment, which allows the use of controls in market situations. Recent examples of this type of research include Sydnor (2006), Bertrand et al. (2005), and Miravete and Palacios-Huerta (2004). These type of studies test hypotheses generated in both the conventional and behavioural economics literature and are conducted by economists from both fields as well. One possible extension here is to employ the field experiment approach to link the results from FTC survey studies reporting on how consumers perceive a particular advertisement or disclosure to how they actually use this information in their purchase decisions.

Fraud

The FTC's fraud program stands largely outside the decision-making approach described above. Since the fraudulent activities addressed by the agency often involve false claims for useless products, regulatory actions against a firm involve none of the costs typically considered under the unfairness or asymmetric paternalism decision rules. But there nevertheless is a behavioural element, because fraud cases involve consumers whose decision patterns often stray far from those predicted by the rational actor model and are difficult to classify as 'reasonable'. Past cases have involved claims for products that strain credulity, such as ionised bracelets, weight-reducing insoles and 'structured water' globes to wash clothes without soap. Fraudulent weight-loss products are particularly popular at present, leading the Commission to provide a guide to the media and industry listing a number of 'obviously' false claims (FTC 2003).¹¹

The reasons for such overly credulous behaviour on the part of consumers is perhaps best explained in the behavioural economics literature, although there has

¹¹ The claims listed may be obviously false to the regulator but presumably are not to the consumers who continue purchasing the weight-loss products.

been little attempt to bring such results formally into consumer protection policy deliberations. Rather, justification for anti-fraud programs is based partly on traditional economic rationales such as the need to offset the negative externalities associated with unchecked false claims that reduce the value of legitimate advertising messages, and the possibility that well-publicised enforcement actions can both deter fraudsters and put customers on greater alert. But probably a more important rationale is rooted in societal values concerning fairness and equity.

Reaching consumers of the more egregious frauds is quite difficult and is an area where behavioural economics research could help. Interestingly, there does not appear to be much of a focus on the types of individuals most susceptible to fraudulent claims in behavioural economics research, which seems to deal more with ‘normal’ people who go off the tracks in certain predictable ways. An FTC report (Anderson 2004) on fraud activity provides a general profile of those most likely to be victimised by fraud, which can serve as a starting point for identifying the types of subjects that are most relevant to psychological research.

Concluding remarks

The FTC, as well as most other consumer protection organisations, has been practising various forms of behavioural economics for some time now. This is probably most apparent in the fraud area where informational policies are deemed insufficient in many instances because of the difficulties fraud victims have in overcoming emotional attachments to the attractions of products such as weight-loss products that entail no diet or exercise and get-rich schemes without risk. It is also the case in the regulation of more legitimate products where there is a strong emphasis on defining a reasonable consumer as one revealed by copy tests and not economic theory.

Nevertheless, behavioural economics can bring unique insights into the consumer protection area by its focus on opening up the black box of consumer behaviour so as to understand why consumers make the decisions that they do. The task of this conference, as was the previous one conducted by the FTC, is to identify how the behavioural economics approach can be used to inform consumer policy.

4.4 Behavioural economics conference at the FTC

The FTC conference ‘Behavioural Economics and Consumer Policy’ was held on 20 April 2007 in Washington, DC.¹² Mulholland (2007) provides a full summary. Here I discuss two issues raised at the conference that have special relevance for the Productivity Commission roundtable:

- Are there new public policy initiatives that can be justified by the current behavioural economics research record?
- What approaches toward the empirical analysis of consumer behaviour will be most effective in guiding public policy in the future?

Public policy

No new policy suggestions came out of the conference. This is perhaps not surprising considering that behavioural economists have only recently addressed the implications of their work for consumer protection policy. While a number of research results presented at the conference suggested possible policy initiatives, there was general agreement that more evidence based on market settings is required to justify such actions. In this latter regard, there was a call for greater use of field experiments, which allow for controlled testing of behavioural hypotheses in market situations. Participants also noted the importance of not only using research to identify instances of consumer injury, but also to evaluate the effectiveness of potential remedies for them.

Economists of all persuasions also recognised that the complexity of human behaviour makes the formulation of policy remedies all the more difficult. For example, David Laibson’s paper on ‘shrouded attributes’ (Gabaix and Laibson 2006) demonstrated how market failures can arise in competitive markets where some consumers are unaware that part of the product’s costs arise after the sale. While Professor Laibson showed how competition may not be sufficient to adequately inform consumers about such ‘shrouded’ costs, he was reluctant to propose a specific government action to remedy the problem, stating:

I think the big open question and I concur with many of the people who have spoken today is it’s one thing to describe and model these problems. It’s quite another to know how to fix them, and I certainly don’t. (FTC 2007, p. 37)

Notwithstanding their hesitancy to recommend specific consumer policies, the behavioural economists did suggest a number of potential areas for government

¹² The conference website contains presentations and related papers, as well as a transcript and video of the proceedings. It is located at <http://www.ftc.gov/be/consumerbehavior/index.shtml>.

involvement and where further research should be directed. Colin Camerer, noting the predominance of intuitive thinking for some consumer groups, suggested that the FTC may have been too quick to abandon the ‘ignorant, unthinking, and credulous’ standard in deception cases for one based on the kind of ‘reasonable’ behaviour associated with more rational thinking. In this regard he also emphasised the importance for consumer policy of doing a better job of identifying different kinds of cognitively-challenged or inexperienced segments of consumers. One potentially important identifying factor here is age. Citing the research conducted by David Laibson and others, he described a U-shaped relationship between decision-making ability and age, with the most problems being experienced by the young and the old.

One impression that I came away with from the conference was the added complexity of regulation introduced by the behavioural economics research. Instead of the relative simplicity of the neoclassical model, behavioural economics confronts the regulator with a host of alternative behaviour patterns that make it all the more difficult to predict how consumers will react to a particular remedy and thus how it will affect consumer welfare. The state of the literature is such that there appears to be too many ways in which consumers stray from the rational actor model, often in ways that conflict with each other.¹³ The added complexity introduced by behavioural economics serves, in my view, to weaken the case for government intervention.

The ambiguity that can arise from this overabundance of theories was illustrated in the discussion of the Howard Beales research on the use of credit card data to test theories of consumer behaviour based on differing predictions of the neoclassical and behavioural models. Beales’ finding that consumers’ use of credit cards contradicted predictions of the behavioural models was challenged on the grounds that the credit card usage pattern he observed was consistent with equally plausible alternative behavioural theories. This is a reasonable critique, which tends to weaken Beales’ argument that his tests reject ‘the’ behavioural model. But the multitude of possible behavioural theories, each with different predicted effects, makes it difficult to use any one of them as the basis of public policy interventions.

Another discussion along similar lines involved Justin Sydnor’s (2006) analysis of consumer choice of deductible levels for property insurance. Sydnor reported that a prospect theory model did a much better job of predicting deductible choice than did the neoclassical one based on expected utility of wealth. But Sydnor found no basis for considering the consumers ‘irrational,’ since they appeared to be making choices that were consistent with their preferences as revealed in controlled

¹³ This point was made quite succinctly at the Productivity Commission roundtable by Paul Frijters. See also Berg and Girgerenzer (2007) and Klick and Mitchell (2007).

laboratory experiments and incorporated in his prospect theory model.¹⁴ This observation in turn generated a lively discussion of the rationality of other apparent cases of over insurance, such as the purchase of extended warranty contracts. Although all agreed that how the information is presented to consumers influences their choices of such insurance packages (and other products and services involving probabilistic reasoning), no consensus formed regarding whether a particular frame could be adopted that would reveal one's 'true' preference.

Empirical approaches

The bulk of research reported at the conference came from field experiments (loosely defined) in which consumer behaviour is studied in market situations where the analyst nevertheless exercises some degree of control over the subjects and the rules they operate under. Field experiments described at the conference examined credit card usage, choice of phone plans, choice of deductible level for property insurance, and responses to credit offers. This research approach offers the promise of combining the rigour of the lab experiment with the added reality of research based on market outcomes. Not surprisingly, none of the reports lived up to the ideal. One basic problem is that the experiments were largely conducted by firms selling the relevant product, which led to inevitable limitations on the ability of the economic researchers to fully control how the project was implemented.¹⁵ Nevertheless, all of the studies provided a good deal of insight into consumer behaviour in ways that neither the lab experiment nor the econometric exercise can match.

There was much enthusiasm for the further use of field experiments to explore consumer protection policy issues. What appeared to be especially promising is the use of panel data such as employed in the credit and phone studies to analyse not only how consumers make mistakes but how they learn from them. It turns out that many of the differences between behavioural economists and their more conventional counterparts are linked to differing views of consumer learning patterns. Obviously, the prospects for effective government intervention (especially of the 'strong' paternalistic variety) are higher where consumers are slow to learn

¹⁴ This was for the initial purchase of insurance, where a significant proportion of customers elected to pay amounts well above expected value for the low deductible option. While this pattern appears rational according to Sydnor's model, he went on to suggest that the failure of most customers to change their deductible amount in subsequent periods (as their economic and property situation changed) may reflect consumer inertia.

¹⁵ Reacting to this situation, Matthew Rabin argued that agencies such as the FTC need to take the lead in generating their own field experiments. He suggested that the information released by companies to researchers may be biased toward areas where consumer problems are less likely to be found.

ways to cope with the consequences of their mistaken behaviour, and at the extreme, fail to learn at all because they never realise that they made a mistake in the first place. Well-structured field experiments can shed light on this issue in ways that market based studies cannot.

The other statistical approach demonstrated at the conference was the survey analysis conducted by Lacko and Pappalardo (2004, 2007). This represented an extension of the traditional FTC copy test in that there were considerably more subjects used and there was an attempt to estimate the materiality of the differing disclosure formats by asking questions about purchase intentions. While the Lacko and Pappalardo (2004, 2007) research drew a favourable response from the behavioural economists, there was unfortunately not much in the way of advice as to how the techniques used in the psychological experiments could be used to enhance the survey approach.¹⁶ There seems to be a natural potential for synergy between the two empirical techniques, since the survey approach focuses on how consumers perceive information while the psychological experiment examines how individuals make decisions based on the information given to them. The one possibly useful suggestion in this regard came from the behaviouralist Eric Johnson who, citing his experience as a marketing researcher, suggested that the FTC and other government agencies consider doing ‘partial rollouts’ to assess the impact of the mandated disclosures being tested.¹⁷

Finally, Colin Camerer offered two interesting research suggestions to explore. The first was to conduct longitudinal lab experiments so as to assess the importance of learning and to test for the kind of ‘disclosure fatigue’ discussed at the conference. The second was to apply the ‘eye tracking’ research methods used by himself and Eric Johnson that measure a person’s pupil dilation and its correlation with arousal and cognitive difficulty. Camerer suggested that this technology may have a number of consumer policy applications, for example, in determining whether people literally read the fine print on informed consent documents. It could also be used to complement the Lacko and Pappalardo (2004, 2007) type survey study by serving as a check on the answers supplied by the subjects regarding their interpretation of particular advertisements or disclosures.

¹⁶ The concept of framing effects, the most cited psychological insight in this regard, has in fact been fully incorporated into survey methodology for some time now via the academic marketing literature.

¹⁷ One effort that seems to come close to this suggestion is the Australian Competition and Consumer Commission program to inform the public on risk properties of low tar cigarettes, which was evaluated in stages that could be considered ‘rollouts’ (ACCC 2006).

4.5 Concluding remarks: where to go from here

I conclude by discussing a number of areas where behavioural economics may be combined with the conventional variety to provide useful insights for consumer policy.

Choice overload¹⁸

There are two strands of thought regarding the manageability of choices facing consumers. The first sees an increasingly diverse and confusing set of choices facing consumers, especially in the credit area and in some recently deregulated sectors such as telecommunications and electricity. At the FTC conference, Tim Brennan cited his research in electricity markets suggesting that the low rate of switching there may indicate a revealed preference among consumers not to choose (Brennan 2007a). In contrast Eugenio Miraverte and Alan Schwartz pointed out instances where increases in competition lead to a more coherent set of choices for consumers that better matches their preferences.

These contrasting views do not necessarily conflict since they are often based on different sectors and markets, as well as different research methods. But there are nevertheless striking differences in inferences for policy that deserve further study. For example, contrast the Miraverte (2007) finding that the introduction of competition into cellular markets lifted the ‘fog’ on prices by inducing firms to offer simpler and less deceptive tariffs, to the Wilson and Price (2005) finding for UK electricity markets that ‘consumers make more efficient decisions in markets with fewer competitors’. The UK may be an especially fruitful area of research due to the recent regulatory changes there and to a large database of information on switching behaviour generated by extensive Ofcom surveys.¹⁹

Aside from information provided by the firms selling products and services, the

¹⁸ It is worthwhile to note that the debate over whether consumers are getting ‘overloaded’ with too much information predates the recent behavioural economics literature, going back at least to the 1970s. In his 1983 review paper, Rudd addressed the question: ‘does the provision of more information improve consumer decision making or does it instead produce information overload, and thus confusion and poorer decisions?’ (Rudd 1983, p. 465).

Rudd’s evaluation of the relevant research leads him to conclude that the disclosures have had a net positive effect, but he also recommended that policy makers shift their emphasis from the quantity of the information supplied to its quality — defined as including presentation format, the ease with which it can be processed by consumers, and the likelihood that consumers can be motivated to use it. (Rudd 1983, p. 470)

¹⁹ The relationship between switching rates and consumer welfare can be a difficult one to discern. See, for example, the McAuley discussion in Appendix B of Choice (2007).

government and third-party entities also provide information that can help simplify the purchase process for consumers (and create important feedback incentives for firms to alter their offerings). In regard to the former, Tim Brennan's examples of government attempts to 'help' consumers in a number of deregulated markets do not inspire much confidence (Brennan 2007b). It would be interesting to find out just what went wrong in these cases. Possible reasons include:

- the gains from switching were small in any event so the regulators did not put much energy into explaining them
- regulatory constraints required excessive detail
- insufficient incentives for the regulators to do a good job.

Hopefully Brennan's examples are located at the tail of the distribution so it is possible to examine differences in informational performance among government agencies — with behavioural as well as more conventional models of regulation in hand (Rachlinski and Farina 2002).

Third-party information entities offer another source of help to consumers. The most cited example is *Consumer Reports* in the US, but its reach remains limited (due in part to the organisation's ban on firms spreading favourable test results via their advertising). More help may come from explicitly commercial information providers that have evolved via the internet. One interesting example is the case of online insurance broker sites, such as QuickQuote.com, that give a clear comparison of rates and provide direct access to the various insurance companies. The policy challenge here is to create environments that allow use of the comparison site business model in markets, such as electricity and telecoms, where more useful consumer information is needed.

Another important source of information comes from online product reviews generated by consumers themselves via such sites as Amazon, Ebay, and Epinions. As described by Ghose and Panagiotis (2006, p. 1):

In offline markets, consumers' purchase decisions are heavily influenced by word-of-mouth. With the rapid growth of the Internet these conversations have migrated in online markets, creating active electronic communities that provide a wealth of product information. Consumers now rely on online product reviews, posted online by other consumers, for their purchase decisions. Reviewers contribute time, energy, and other resources, enabling a social structure that provides benefits both for the users and the companies that host electronic markets. Indeed, the provision of a forum facilitating social exchanges in the form of consumer product reviews is an important part of many electronic markets, such as Amazon.com.

Important research and policy questions here revolve around whether this new kind of information available to consumers simplifies their choices or makes them even

more difficult and leads to yet more biased decision making. Ghose and Panagiotis (2006) provides a number of useful references to the emerging literature in this area, which suggest that the issue is far from settled.

Cooling-off rules

Cooling-off regulations, such as the FTC's door-to-door sales rule and similar rules promulgated in the credit area, are often cited as examples of laws that successfully incorporate behavioural economics insights. In particular, these rules are premised on the view that consumers at times make purchases in emotionally or biologically 'hot' states that, in a cooler and more rational state, they would not make. Mandating a cooling-off period allows consumers to reframe their choices and to give them an opportunity for rational reconsideration to overcome the influence of impulsive choice.

Notwithstanding the apparent widespread acceptance of cooling-off rules, they have not been subjected to the kind of asymmetric paternalism or unfairness tests described above. For example, the FTC rule appears to have been created without the benefit of any systematic research to document its value (McChesney 1984). While there has been some research into the rule's impact, it has been fairly limited in scope.²⁰

From a behavioural standpoint, we know relatively little about how consumers respond to cooling-off rules. The ideal is that they allow consumers to cancel those contracts that, in a more rational state, they realise are not for them. Over time, as consumers cancel bad contracts, firms should be deterred from making such deceptive offers in the first place. But the existence of cooling-off periods can have the opposite effect of inducing more welfare-reducing purchase decisions. This would occur if the existence of a cooling-off period leads consumers to make more impulsive purchase decisions because they exaggerate their ability to revisit the contract terms in a cooler state.

The latter behavioural story is similar to that applied to consumer rebates where consumers make a purchase based on what turns out to be the false assumption that they will redeem the rebate in order to get the price discount. Research in this area by Silk (2006) and others suggests that the likelihood of redeeming a rebate may be *inversely* related to the length of the rebate period. This result is consistent with theories in the marketing and behavioural economics literature suggesting that as the time allotted to perform a (simple) task increases, so does the likelihood of

²⁰ Examples include Shanklin and King (1977), McChesney (1984), and the FTC's review of its Cooling-Off Rule in 1995 (FTC 1995).

failing to complete the task (Ariely and Weterbroch 2002; Zauberma and Lynch 2005).

The current research record is relatively sparse and sheds little light on these two competing theories. In regard to the Cooling-Off Rule, most of the available evidence concerns cancellation rates, which appear to be low. Also, an early study of the FTC rule found that cancellation rates fell after the rule was implemented (Shanklin and King 1977). The fact that relatively few consumers cancel during the cooling-off period is consistent with the behavioural lulling story, but it is also consistent with one in which cooling-off rules result in less deceptive practices and hence less need to cancel (or indeed with the assertion that there was no need for the rule in the first place).

In addition to the general issue of how consumers use cooling-off periods, there is the question of how they react to variations in the length of such periods. As illustrated in the rebate discussion, lengthening the period given to consumers for making a post-purchase action can, after some point, lead them to be less likely to follow through on their intentions. In this sense, increasing the length of the cooling-off period is similar to increasing the time given consumers to redeem their rebates.

Finally, the rise in the use of liberal return policies by retailers can be viewed as a market equivalent to mandated cooling-off periods. Both allow the consumer to opt out of a purchase after a certain period of time. Of course the products and services that come under each provision differ, but the use of liberal return policies lends credence to the idea that cooling-off periods can induce greater sales by reducing the perceived risk of getting stuck with a bad purchase — whether or not that perception turns out to be correct.

5 Having one's cake and eating it too — an analysis of behavioural economics from a consumer policy perspective

*Chris Field*¹

Ombudsman, Western Australia

5.1 Introduction

I am delighted to be here today to participate in this roundtable discussion on behavioural economics and public policy. The Productivity Commission should be warmly congratulated for organising the roundtable — it is timely, as behavioural economics has not simply gained considerable prominence as a discipline within economics, but increasingly, is being utilised to suggest public policy interventions into the operation of markets. In terms of consumer policy — the focus of this session — the roundtable is, of course, particularly timely given that this year marks the Productivity Commission's review of Australian consumer policy, and the Commission will, quite properly, be seeking to inform itself of how behavioural economics might be utilised in the design and implementation of consumer policy in the years ahead.

In their paper setting out the arguments for regulation based on the discoveries of behavioural economics, Professor Colin Camerer and his co-authors claim that behavioural economics offers the opportunity to 'have one's cake and eat it too' (Camerer et al. 2003, p. 1212). In fact, in deference to the sweet of choice of the behavioural economics literature, perhaps this statement ought to be amended to

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having one's Twinkie and eating it too! The principal challenge I have set myself today is to test this statement. To do so, I will begin by examining the key aspects of the behavioural economics debate, including the value of liberty and free markets and the problems of paternalism. I will then move on to consider some of the challenges to behavioural economics theory, before moving to consider two practical applications of behavioural economics theory: unfair contract terms and extended warranties. This will lead me to some concluding remarks about behavioural economics and its use in designing consumer policy.

Before I start my paper proper, I do need to make clear that the views I express are mine alone and do not represent the views of the office of the Western Australian Ombudsman, the Western Australian Government or any other organisation with which I have been, or am currently, involved.

5.2 Behavioural economics: Key aspects

Any analysis of behavioural economics requires an understanding of its key aspects. Here I have identified four: behavioural economics itself; liberty; paternalism; and free markets.

What do we mean by behavioural economics?

Behavioural economics is a discipline within economics that studies suggested problems in standard economic theories, with particular reference to the observed, as opposed to theorised, behaviour of consumers.² Behavioural economists have also applied their theories to public policy problems, suggesting solutions to correct behavioural mistakes (Camerer et al. 2003). These corrections range from interventions that are obviously paternalistic, to those that are said to be a new form of paternalism — that which intervenes but respects liberty and freedom of choice. In this paper, I will largely leave unexamined those consumer policy solutions that are said to be 'hard' paternalism (those that clearly remove choice or restrict liberty), to concentrate on those policy solutions that are said to be newer 'soft' paternalism. This is largely because I think it is much easier to refute the interventions which are paternalistically 'hard'. This leaves the more complex challenge to discuss, which I think is more interesting for me, and I hope, for you.

² See, for example, Pesendorfer (2006)

Why should we value liberty?

For those of you familiar with the behavioural economics literature, you will know that it spends some time considering the relationship between behavioural economics theory and restriction of liberty. But why should we value liberty? As much as the behavioural economics literature on new paternalism seeks to defend the concept of libertarian paternalism from accusations that the concept is an oxymoron, the value of liberty is taken, largely correctly I think, as being tautological (or else there would be little point in making the defence).

Indeed, whether you believe that liberty has value as a matter of right, or as a consequentialist consideration, its value is widely accepted. The capacity to live one's life in an autonomous way is one of the most central of all social values in modern, democratic societies (Trebilcock 1993).³ Critically, for what I will say later in this paper, autonomy is a freedom to choose correctly and a freedom to choose poorly. The value of autonomy is that we are the author of our successes and failures, and we have the capacity to learn and develop from the mistakes that are made.

Why should we be concerned about paternalism?

As much as the behavioural economics literature spends time on considering its potential to restrict liberty, it also counters the claim that it is paternalistic (or at least a form of paternalism that is considered egregious). Why should we be concerned about paternalism? In the context of consumer policy, paternalism has at least two fundamental problems. First, it adds red tape and costs to consumer transactions. In its report on 'red tape', the Australian Taskforce on Reducing the Regulatory Burden on Business noted:

... a 'regulate first, ask questions later' culture appears to have developed. Even where regulatory action is clearly justified, options and design principles that could lessen compliance costs or side-effects appear to be given little consideration. Further, agencies responsible for administering and enforcing regulation have tended to adopt strict and often prescriptive or legalistic approaches, to lessen their own risks of exposure to criticism. This, in turn, has contributed in some areas to excessively defensive and costly actions by business to ensure compliance. (Regulation Taskforce 2006, p. ii)

Second, paternalism goes to the heart of the exercise of liberty and autonomy by consumers — it restricts autonomous action and is disapproved of accordingly. Excessive paternalistic action undertaken by government is often referred to as the

³ The classic defence of the libertarian principle can be found in John Stuart Mill, *On Liberty*.

‘nanny state’ — overbearing governmental action, whereby we are protected from ourselves on the basis that others know best for us (Regulation Taskforce 2006).

We should be clear that paternalism takes many forms — not all forms are as restrictive of liberty, nor involve the same level of costs (Dworkin 2005). Most notably, paternalism can be strong — for example banning smoking. This kind of paternalism has been described by noted philosopher Joel Feinberg as having an ‘acrid moral flavour, and creates serious risks of governmental tyranny’ (Feinberg 1983, p. 11). Paternalism can also be weak — interference to ensure voluntariness of action, rather than the action itself. Moreover, many governmental regulations that appear paternalistic may also have other (or multiple) motivations — say, for example, the wearing of seatbelts.

Why should we value free markets?

The level to which we are concerned about interventions into free markets to correct consumer behaviour is dependent upon the level to which we value free markets. I hesitate, given the audience today, to spend much time on this question. While I will assume that most of you readily accept the value of markets and, concomitantly, will, therefore, be concerned that market interventions, such as those suggested by behavioural economists, must be carefully considered, I am not prepared to take this assumption for granted. There are at least three reasons for this. First, a conversation that I recently had with my mother-in-law after we both watched a *Lateline* story on regulated shop-trading hours, whereupon she proceeded to argue for greater protection for small business owners who needed a government-guaranteed fair price to stay in business. Second, my own research undertaken for Consumer Affairs Victoria on the role of consumer advocacy where I found:

Yet, despite the fact that competitive markets are the bedrock upon which the long term interests of consumers are built, ironically, this is the area of activity which Victorian consumer advocates are most disinclined to embrace. It is, therefore, unsurprising that consumer advocates are regularly ineffective as a voice against anti-competitive industry protectionism — they are suspicious of the benefits of competition (or, put another way, the harm caused by anti- competitive behaviour). (Field 2006a, p. 11)

Third, a very good article by Bryan Caplan (2007), an Associate Professor at George Mason University, titled ‘The myth of the rational voter: Why democracies choose bad policies’. In his article he sets out very cogent reasons for why citizens tend to display an irrational bias against markets (drawing, in fact, upon behavioural economics literature). Having read Professor Caplan’s piece, I have decided that perhaps it isn’t even too bold of me to suggest that some behavioural economists

might, from time to time, display a certain amount of anti-market bias!⁴

The value of markets: normative and empirical considerations

If you place weight on individual liberty, then it follows that you must place weight on private exchange and private ordering. A market system promotes private exchange and ordering. Professor Michael Trebilcock notes that free-market scholars have surmised that:

Private ordering ... minimises the extent to which individuals are subjected to externally imposed forms of coercion or socially ordained forms of status. Private ordering is the quintessential form of government with the consent of the governed. (Trebilcock 1997, p. 133)

Combined with this valuing of private ordering, those who place strong value on liberty (again in the words of Michael Trebilcock):

... often bring some degree of scepticism to bear on the capacity of collective decision-makers eg legislatures, regulators, bureaucrats, or indeed courts, to adopt policies or laws that will unambiguously increase net social welfare. (Trebilcock 1997, p. 132)

Apart from these normative considerations, we can point to a range of empirical observations about the success of open, competitive market-based economies, including their comparative success against other ways of ordering and exchange that have been utilised throughout human history. In the words of Stanley Fischer:⁵

The world and the economic system we live in is highly imperfect. There is much that needs to be done to make it work better. But as we do that, we should maintain a perspective that reflects what Winston Churchill said of democracy: 'The pro-market, pro-globalisation approach is the worst economic policy, except for all the others that have been tried.' (Fischer 2003, p. 33)

There is reliable, independent evidence that demonstrates the value of competition to consumers. In its 2005 report on the outcomes of Australian competition reform, the Productivity Commission set out a series of these benefits:

- National Competition Policy was a key aspect of improved productivity performance in the second half of the 1990s.

⁴ In fact, Professor Caplan's piece is directed not at the misunderstanding of economists, but citizens generally: '... if there is one thing that the public deeply misunderstands, it is economics' (p. 1). In discussing, anti-market bias he notes that '[a]lmost all economists recognise the core benefits of the market mechanism; they disagree only at the margin' (p. 10). In fact, authors have suggested biases by behavioural economists against the fundamental underpinning of markets, including, particularly, property rights (Klein 2004, p. 67).

⁵ I am grateful to Lyndon Rowe for drawing my attention to this paper.

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- A permanent (at least) 2.5 per cent increase in our Gross Domestic Product (GDP). This equates to, at minimum, an additional \$20 billion for the Australian economy.
 - Average real prices for goods and services have fallen, for example, in the electricity sector by 19 per cent and in the telecommunications sector by 20 per cent. (Productivity Commission 2005, pp. XVII–XIX)

All of our economic policies, be they founded on neo-classical, behavioural or other theories, are means to ends, not ends in themselves. The end that we are seeking to promote is the enhancement of the long-term interests of consumers. As I discuss behavioural economics, I do so in this context. How do we achieve the long-term interests of consumers?⁶

First, economic efficiency is the bedrock upon which the long-term consumer interest is built — we should recognise that it is, principally, the free operation of markets that will be the primary tool to achieve economic efficiency. Of course, when I use the term ‘free market’, I don’t mean market freedom in the way that, say, a Milton Friedman would think of free markets. I accept as proper a range of interventions into markets, for example, regulation of natural monopolies, regulations designed to ensure open competition by making unlawful anti-competitive conduct (in other words, the provisions of Part IV of the *Trade Practices Act*), laws prescribing product safety and minimum standards, laws to protect consumers from inappropriate market practices (such as misleading conduct), to provide redress for disputes (and enforcement of bargains), and to ensure that consumers are properly informed in their choices.

I think the real issue here is not one of regulation versus no regulation, but ensuring that, since our starting point is the efficiency-enhancing effect of markets, that regulation is never introduced, regardless of whether it is suggested by behavioural economics theory or any other theory for that matter, unless:

1. There is a demonstrated need for the regulation
2. The proposed regulation will actually remedy the problem
3. The proposed regulation is the least restrictive on consumer sovereignty of the policy tools at our disposal
4. The costs imposed by the regulation are outweighed by the benefits of the regulation.

In short, regulatory protections suggested by behavioural economics research that

⁶ I have drawn upon material previously published by me for the remainder of the text in this section, in particular, Field (2006b, pp. 71–76) and Field (2005, p. 45).

stifle economic efficiency are undesirable, unless it can be clearly demonstrated that the cost of that inefficiency is outweighed by the benefits of our protective actions.

Whilst I am of the view that redistributive policies are among the most important for governments to pursue — and there can be no doubt that some aspects of applied behavioural economics have a redistributive character — we should generally be cautious when using consumer policy as a social (or distributive) justice mechanism. Generally speaking, although not exclusively, our otherwise perfectly reasonable redistributive aspirations are best served by more efficient means such as the taxation and welfare systems and spending on health, education and other sectors of the economy.

5.3 Challenges to behavioural economics theory

In the next section of my paper, I want to examine some of the key challenges to behavioural economics theory. In particular, I want to explore problems of substituted decision-making, occasional versus dispositional autonomy and non-coercive interference with liberty.

The problems of substituted decision-making

In their article, ‘Libertarian Paternalism’, Professors Richard Thaler and Cass Sunstein (2003) describe the problem faced by a hypothetical director of a company cafeteria. The director has become aware that the order in which food is placed influences the choices that people make. The authors set out the three strategies available to the director. First, ‘she could make choices that she thinks would make the customers better off’. Second, ‘she could make choices at random’. Third, ‘she could maliciously choose those items that she thinks would make the customers as obese as possible’. The authors conclude that ‘Option 1 appears to be paternalistic, which it is, but would anyone advocate options 2 and 3?’ This problem bears out a key dilemma for Thaler and Sunstein: proxy decision-makers often have no choice but to act paternalistically and if that is the case then why wouldn’t you choose the option that is obviously best for consumers? In the words of Thaler and Sunstein it is a:

... misconception that there are viable alternatives to paternalism. In many situations, some organisations or agents must make a choice that will affect the choices of other people. (Thaler and Sunstein 2003, p. 175)

An unstated premise of this argument is that choosing to eat foods that lead to obesity (or other health problems) is something that is not in the best interests of consumers. I will leave aside two problems with this initial premise: first, that not

all consumers will act homogeneously in the committing of behavioural mistakes (that is, at least some consumers will choose the ‘healthy’ foods even when the ‘unhealthy’ foods are first in the cafeteria line) (Whitman 2006); and, second, that the mere choosing to eat unhealthy foods on any given occasion in a cafeteria line is not, in of itself, causally linked to an unhealthy outcome. The choice to eat these foods much of the time, a lack of exercise and a range of other factors would need to be considered.

Can we be confident that choosing to eat unhealthy foods is something that is not in the ‘best’ interests of consumers? Thaler and Sunstein use what appears to be an easy example — these days, who wouldn’t think that obesity is a problem and that excess consumption of fatty foods is causally linked to obesity? Unfortunately, many (perhaps most) public policy problems simply don’t have a readily identifiable ‘best’ solution. This means that we are going to have our proxy decision-makers make a decision for us on what is the ‘best’ of a range of paternalistic options. One problem is that, in arriving at the ‘best’ solution, proxy decision-makers will make mistakes (Whitman 2006). What we know about governments, regulators and decision-makers is that they make all sorts of mistakes in arriving at the ‘best’ solution. This is partly because the sorts of mistake-making behaviour that behavioural economists observe in ordinary consumers can be expected (and indeed observed) in those that make decisions for us. Moreover, proxy decision-makers have all sorts of other factors operating that potentially lead to worse decision-making than that made by consumers themselves. For example, you do not have to be a strict adherent to the economic theory of regulation to observe that governments of any persuasion can be overly influenced by vested (mostly producer group) interests that seek regulatory protection from markets for their gain and to the cost of consumers (Field 2005, pp. 8–13).⁷ In fact, one very good reason why those who advocate for the interests of consumers should favour a default position in favour of open, competitive markets (and a rigorous set of pre-conditions to intervene in markets), is the fact that much of the regulatory intervention that occurs in markets is rent-seeking from producers that is detrimental to consumers.

Finally, while consumers suffer from information asymmetries, so of course do proxy decision makers — in fact, their information deficits are likely to be worse than that of consumers, leading to greater error in decision-making.

⁷ See generally Glaeser (2006): ‘On the supply side, purveyors of influence have the capacity to change popular opinion. On the demand side, human beings have some capacity to limit errors, especially with the time and incentives to acquire advice and information’. (Glaeser 2006, p. 134)

In my view, when it comes to making these judgments about the behaviour of other consumers, an obvious question arises: in short, ‘says who?’ Much more eloquently, in *On Liberty* John Stuart Mill famously stated that:

Mankind are greater gainers by suffering each other to live as seems good to themselves, than by compelling each other to live as seems good to the rest. (Mill 1956, p. 17)

I think behavioural economists do not give sufficient weight to the problems of substituted decision-making and also discount the possibility that, either deliberately or unwittingly, there is a potential for one person to substitute their version of normal behaviour for that of another person. In his seminal essay ‘Paternalism’, Gerald Dworkin observed:

Of course ... there are great difficulties in deciding what rational individuals would or would not accept. Particularly in the sensitive areas of personal liberty, there is already a danger of the dispute over agreement and rationality being a disguised version of evaluative and normative disagreement. (Dworkin 1983, p. 29)

Occurrent and dispositional autonomy

Another concern is the possibility of focussing on ‘transactional’ decision-making at the expense of ‘whole-of-life’ decision-making (or, in a strict philosophical sense, the difference between occurrent and dispositional autonomy). In short, we learn from our mistakes and those experiences make our subsequent decision-making stronger. More importantly, we are the authors, and the owners, of the mistakes and the successes from our learning. Similarly, behavioural economics places a bias on long-term interests in contrast to short-term interests (this is evident in behavioural economists’ views about matters such as retirement savings plans). In his recent critique of so-called ‘new paternalism’, Glen Whitman argued:

... new paternalism blithely assumes that, when your present self can impose costs on your future self, the outcome is necessarily bad. But preventing harm to the future self might involve even greater harm to the present self. There’s no valid reason to assume, when there is an inconsistency between present and future interests, that the latter must trump the former. (Whitman 2006, p. 14)

Does non-coercive paternalism offend liberty?

Thaler and Sunstein (2003, p. 175) tell us that, ‘if no coercion is involved, we think that some types of paternalism should be acceptable to even the most ardent of libertarian’.

Whether an intervention in a market, or restriction in individual liberty, is achieved

through coercive or non-coercive measures, it does not change the fact that such intervention is, in fact, paternalistic. Of course, Thaler and Sunstein do not suggest otherwise. Their argument is that this non-coercive action (which they call libertarian paternalism) is a form of liberty-respecting paternalism, one that retains choice whilst guiding one towards the best choice. *The Economist* has stated (of Thaler and Sunstein) that they:

... offer a vision of what you might call the ‘avuncular state’, worldly-wise, offering a nudge in the right direction, perhaps pulling strings on your behalf without you even noticing. (*The Economist* 2006, p. 65)

To my mind, this is exactly the sort of summation of behavioural economics that affronts consumer autonomy. I think that the behavioural economists are in error to emphasise the fact that paternalistic intervention is not egregious simply because choice has not been removed. The error made here is that it is not the retention of choice that characterises liberty, but the capacity to exercise those choices free of intervention from others, be it coercive or non-coercive intervention.⁸

5.4 The application of behavioural economics

The behavioural economics literature is now being utilised to suggest a range of market interventions that are said to increase consumer welfare. Examples include retirement savings programs, investor protection and disclosure — most of these examples involve changing defaults, removing biases and the like. I will discuss two: unfair contracts and extended warranties.

Unfair contracts

A number of authors are now using the findings of behavioural economics to suggest that governments, courts and regulators should intervene to regulate terms of contracts that are deemed to be unfair.⁹ In their article, ‘Unfair terms in “clickwrap” and other electronic contracts’, Clapperton and Corones (2007) argue that regulation should be introduced to remove unfair terms in electronic consumer contracts. The authors set out the rational maximising view of consumers which they suggest entails that:

If consumers are dissatisfied with the quality of a product relative to its price, or the terms on which a product is offered, they will discipline producers by ceasing to

⁸ Glaeser, (2006, p. 135) notes that ‘soft paternalism is neither innocuous or benign’.

⁹ For example, Clapperton and Corones (2007); Howell (2006).

purchase the product. (Clapperton and Corones 2007, p. 152)¹⁰

They go on to note that:

Behavioural economics, on the other hand, challenges this underlying assumption. They start from the premise that there are limits to rationality. They are sceptical about the ability of certain categories of consumers to make decisions in their best interests and believe that regulation may be necessary to protect them. (Clapperton and Corones 2007, p. 152)

The authors urge the Productivity Commission to consider the ‘observed behaviour’ of market participants and state that there is no clear evidence that consumers faced with unfair terms in electronic contracts cease buying the product.

The fact that consumers do not cease buying a product even though it contains unfair terms may well be an example of behavioural mistakes being made by consumers. The authors seem to ignore, however, the other perfectly reasonable explanation for this observed consumer behaviour, namely that consumers continue to buy the product, perfectly cognisant of the unfair terms, but simply valuing other terms of the contract beyond these unfair terms.

In other words, some contractual terms, while unfair to lawyers, might be considered perfectly fair by consumers. Consumers might well understand that a harsh term is a trade-off for a good price. There is no rational mistake made by the consumer who chooses to benefit from a lower price that is the trade-off for a harsh term. As Ross Parish has noted:

The economic rationale of these provisions is obvious: it is to reduce the costs and risks of doing business. Consumers benefit from them in lower prices. (Parish 1980, p. 239)

To the extent that behavioural economics suggests such intervention, it appears that there is an assumption that such intervention will be costless — unfairness will be removed and that is the end of the matter. This position is wrong. As Ross Parish has noted:

The major error in the legal approach to consumer protection is the tendency of lawyers, judges and legislators to denounce particular terms or aspects of contracts as being patently unfair, without considering them in relation to the contract as a whole and without analysing carefully their purpose, or the consequences of failing to enforce them, or of outlawing them. This is legal technocracy at work, pursuing its imperative value, ‘equity’, regardless of the harmful, costly and frequently perverse consequences. (Parish 1980, p. 238)

¹⁰ The authors, in fact, fail to discuss several aspects of the Chicago school theories on unfair terms and standard form contracts.

Extended warranties

In an episode of *The Simpsons*, Homer discovers that he has crayons lodged in his brain and that is the reason for his lack of intelligence (I won't go into how they got there). They are removed, he becomes more intelligent and — to cut a 24-minute story short — so dislikes being intelligent that he has his bartender, Mo, lodge, one-by-one, the crayons up through his nose into his brain. After one crayon, he says something moderately silly, after a second, something decidedly unintelligent and after the third, spontaneously shouts, 'Extended warranty! How can I lose?' (Camerer et al. 2003, p. 1254).

Camerer et al. (2003) suggest that extended warranties may be one of those occasions where consumers make mistakes. They suggest:

Behavioural economics shows that people often overact to highly salient, rare events, and that people are surprisingly risk averse for small gambles that pose the chance of a loss. Extended warranties capitalise on exactly these patterns of behaviour. (Camerer et al. 2003, p. 1254)

But what would we do about extended warranties? Ban the product? This would seem an extraordinary reaction, particularly in the context of the fact there are a range of consumer protections already in place. Those who sell extended warranties are prevented from misleading consumers about their product¹¹ and prevented from misrepresenting the nature of warranties.¹² Banning the product is not the policy choice that the authors suggest. They state 'the right policy is one that encourages disclosure rather than, say, bans warranties' (Camerer et al 2003, p. 1254). But what disclosure? There is in fact a wide availability of information on product life and average cost of repair that aids assessment of whether the premium to be paid for the extended warranty would be justified. For example, *Choice* magazine publishes this information. What other disclosure would we provide? A pamphlet to every consumer considering purchasing the product? A product warning notice? Signs in stores? These sorts of interventions are potentially significant interventions into the operation of this market, and carry potentially significant costs. In part, this example shows us that where behavioural economics suggests a problem, that does not necessarily suggest any consumer policy response is required. In fact, as Camerer et al note:

If informed consumers continue to purchase the warranties, then it is quite possible that they have good reason to do so, however unfathomable that decision may seem to an economist. (Camerer et al 2003, p. 1254)

¹¹ *Trade Practices Act* 1974 section 52.

¹² *Trade Practices Act* 1974 section 53(g).

5.5 Conclusion

I think most of us can have some sympathy for those who are motivated to correct what appear to be known and repeated mistakes made by consumers, particularly in the context where you suspect, if only they had the chance to exercise greater rationality, they would approve of your choice for them. This motivation will appear even more virtuous to those who combine a scepticism about the operation of markets with a suspicion that corporations are unfairly exploiting consumers' mistakes. An intervention to tip the balance back a little to the consumers' side is a motivation that I think is evident in the work of behavioural economists — an exercise made more palatable on the basis that the intervention appears benign.

Whilst I can understand that motivation, it must be, if not entirely resisted, at least subject to constraints. There are many reasons for this, of which I have discussed a few in this paper. Of these, two stand out for reiteration.

First, liberty matters, because a life worth living is one that you are able to author yourself — brilliant decisions and costly mistakes, silly risks and unnecessary caution and everything in between. You grow and learn from the mistakes you make — and these mistakes can make subsequent decision-making all the stronger. Correcting mistakes before we make them is to change fundamentally the nature of autonomous living and remove from our lives one of the means that individuals, and, for that matter, societies throughout history, have used to develop and improve. What entrepreneur on the way to great fortune, scientist on the way to great discovery or explorer opening up new worlds, hasn't made mistakes, mistakes in many cases based on imperfect calculations the like of which behavioural economists have identified? Individual liberty, combined with freedom of markets, leads to the lowest prices, greatest choice and greatest quality of consumer goods and services. Moreover, our markets left to work, without unnecessary regulatory intervention, lead to the greatest productivity and prosperity for all consumers. To the extent to which we harbour some residual concern that some consumers are making mistaken decisions — mistakes that do not otherwise justify regulatory intervention into markets — we can remind ourselves, in the words of Professor Ross Parish that '[t]he better off we are, the more we can afford to make some mistaken buying decisions' (Parish 1980, p. 242).

Second, proxy-decision makers also make mistakes, driven by both internalities and externalities. If only we could all enjoy the guidance of the perfectly knowing, perfectly choosing, benign and costless hand of Plato's Philosopher King! Rather, behavioural economists fall into their own assessment problems — they underestimate all we have learned about the mistakes governments and other decision-makers make, the costs of interventions, their unintended, often perverse,

consequences and the lack of humility sometimes shown by those who seek to improve the lives of others. The observations of Adam Smith on this matter are as powerful today as when they were written more than 200 years ago:

The statesmen who should attempt to direct private people in what manner they ought to employ their capitals would not only load himself with a most unnecessary attention, but assume an authority which could safely be trusted to no council and senate whatever, and which would nowhere be so dangerous as in the hands of a man who had folly and presumption enough to fancy himself to exercise it. (Smith 1776b, p. 33)¹³

Everything learned thus far from behavioural economics, for me at least, does not change one simple reality — every time we make a consumer policy choice we choose between the operation of imperfect markets on one hand and imperfect governments on the other.¹⁴ I would take that process of choice one step further by saying that our default position should be to favour imperfect markets, but with the knowledge that government intervention is appropriate where we can demonstrate need, likelihood that the intervention will succeed, the absence of less restrictive alternatives than intervention, and that the intervention has net benefits for consumers in the long run.

In my view, this places behavioural economics in its correct context. It is a set of insights about consumer behaviour that may provide useful information in considering consumer policy choices — including government intervention in consumer markets. But it should not be elevated to a status that trumps a rigorous assessment of that market intervention. That case may be made if behavioural economics was some form of unifying theory — a third way if you like — between freedom of markets and consumer protection, but I think that it is not sufficiently explored yet for that to be the case, nor has it answered the very powerful criticisms that are now being directed towards the theory.

Behavioural economists offer to us the ability to have one's cake and eat it too. On this point, we would do well to remember one of the basic axioms of consumer policy: when an offer sounds too good to be true — it probably is!

¹³ Along similar lines, Gerald Dworkin (1983, p. 33) observes: 'However, rational people who know something of the resources of ignorance, ill-will, and stupidity available to lawmakers of a society ... will be concerned to limit such intervention to a minimum.'

¹⁴ A point made by the Productivity Commission (2007) in their Consumer Policy Framework, Productivity Commission Issues Paper.

Discussant — *Louise Sylvan*

Australian Competition and Consumer Commission

Introduction

The Productivity Commission is to be congratulated for holding this roundtable and being at the cutting edge in Australia in examining important emerging developments in economics.

I am particularly pleased to see my colleague from the Federal Trade Commission here — Joe Mulholland — and I have been working on the Economics for Consumer Policy Project at the OECD and the contributions and support of the US delegation to that project have been extremely useful.

Given the limitations on time to discuss the two significant papers by Joe and by Chris Field, only a couple of issues from each of the papers will be addressed followed by some more general comment about behavioural economics and consumer policy.

Joe Mulholland — Behavioural economics and the Federal Trade Commission

Caution

The paper articulates a quite strong caution in terms of how and when one might use behavioural economics insights, and it is a caution that is prevalent in the behavioural economics literature as well. Scepticism is an appropriate stance in relation to any government policy initiatives — new or otherwise — especially ones accompanied by little empirical testing of the assumed effects.

The recommended caution in this paper is framed in a particular way. It is not an ideological positioning that argues that intervention in a market, even to correct market failure, is inherently bad. It is a caution that argues that empirical evidence is likely to be necessary about how consumers actually respond to a proposed intervention and that such empirical evidence increases the chances of obtaining the desired outcomes. The suggestion is that you kick the tyres before you buy the car — that pilot testing is important in the pre-rollout of a new policy initiative.

It is useful to add another observation. Behavioural economics is also important in identifying the problem correctly. In financial services, for example, what may

appear to be a literacy problem may in fact be a framing problem. Identifying such distinctions is important for creating responsible consumer policy, which enables consumers to choose more effectively in meeting their needs.

Complexity of human behaviour

A second issue raised in this paper is that much of the earlier behavioural economics evidence comes from laboratory experiments. The question arises as to whether such findings apply to the real world. In fact, the most cited economic paper — not only the most cited behavioural economics paper — is Kahneman and Tversky's (1979) prospect theory, which is based on a set of decisions about hypothetical gambles.

Many of the behavioural economics findings that are laboratory-derived are also observed 'in the wild', as Colin Camerer (2000) has put it — in the real world. Further, in terms of the current literature, it seems clear that behavioural economists are using a combination of experimental and field data in the construction of their arguments. There is an undoubted trend, however, toward field research (controlled tests of behavioural hypotheses in a real market situation — essentially the rigour of the lab with the reality of the market). This has been the main area of growth and emphasis in recent years. The research of Professor Shafir and his colleagues on the factors in consumers' decision making in taking out a loan is a classic example of a very large field experiment examining what actually influenced people when making their decisions (Bertrand et al. 2005).

The reason that the field research is important is because of the complexity of human behaviour which makes generalised policy prescription more difficult. There are myriad ways in which people can stray from the rational actor model.

Daniel Read, in a paper on the implications of behavioural economics for financial services, commissioned by the Financial Services Authority in the UK, puts the point this way:

Behavioural economics is an empirical social science, and therefore the premises under which it operates provide a less definite guide to policy than do the axioms of economics. This does not mean that it is a worse guide since, as Thaler (for example, 1980) has often observed, the predictions from economics are elegant but often wrong, while those from behavioural economics are messy but more likely to be accurate. (Read 2007, p. 5)

He goes on to discuss various aspects of violations of invariance, as well as the ways in which certain observed consumer behaviours can work against each other, such as risk aversion operating concurrently with excessive optimism or over-confidence.

The point is not only that one needs to road test carefully the effects of proposed measures to assist consumers in making better choices. Governments also need to have some idea about the actual and not just presumed effects of policies in order to determine whether they will yield benefits in proportion to their costs.

Chris Field — Having one’s cake and eating it too

A key point in Chris Field’s theoretical paper is that making interventions in markets can be classed as an affront to consumer liberty — including ‘soft’ interventions designed to assist consumers in overcoming behavioural biases without taking away their freedom to choose. The libertarian view undoubtedly has relevance in this discussion, although a bit more practical policy consideration would have been useful in the paper.

In support of arguments against paternalism, including ‘soft’ paternalism, the author cites John Stuart Mill from *On Liberty*. Mill is a dangerous ally in this matter. The more salient work, given that we are talking about public policy interventions, is Mill’s *Principles of Political Economy* (1876). Below are three quotes bearing directly on the issue of intervention:

Is the buyer always qualified to judge of the commodity? If not, the presumption in favour of the competition of the market does not apply to the case; and if the commodity be one, in the quality of which society has much at stake, the balance of advantages may be in favour of some mode and degree of intervention, by the authorised representatives of the collective interest of the state ...

A second exception to the doctrine that individuals are the best judges of their own interest is, when an individual attempts to decide irrevocably now, what will be best for his interest at some future and distant time ...

The third exception ... has reference to the great class of cases in which the individuals can only manage the concern by delegated agency and in which the so-called private management is, in point of fact, hardly better entitled to be called management by the persons interested, than administration by a public officer. Whatever, if left to spontaneous agency, can only be done by joint-stock associations, will often be as well, and sometimes better done, as far as the actual work is concerned, by the state. (Mill 1876, pp. 572–82)

These quotes are taken from the fifth edition of this great work, although they first occur in the third edition but are not in the first or second editions. So in support of the point that people can learn through their mistakes, Mill not only got older, he also got wiser as he observed more of human activity.

Learning

The paper argues people have a right not to have their mistakes ‘taken away from them’ as it were, so that they can learn to be better consumers. To make a purely *ad hominem* point, there is something a little odd in a paper that attacks paternalism but which repeatedly argues that people should be left to make their own mistakes because that will be a real learning experience, which will ultimately be good for them. If that’s not paternalism, not much else would qualify!

The learning point is important in general, however, and strongly supported by John List’s work which is referred to. There is no doubt that previous experience can influence the information-processing capability of consumers — that is well documented in a range of experimental and market situations. But there is now much more sophisticated evidence about learning and several crucial issues would severely challenge the broadness of the proposition made here.

The first is not a behavioural economic point but a conventional economic one: for search goods and most experience goods, consumers will learn how to choose. These are transparent markets with no evidence of market failure. However, in relation to credence goods and other goods (for example those with shrouded attributes), learning can be difficult, in some cases impossible. Further, there are instances where choosing a product like a pension — that is, the actual form of payout of retirement savings — will occur probably once in a lifetime. Unless one has a belief in indefinite conscious reincarnation, it is rather difficult to learn from making a mistake in this market — possibly a catastrophic mistake given the importance of that particular decision. That is why people are inclined to rely on others for advice in complex financial markets, which can bring with it its own market failure or consumer protection problems.

There is something a bit unsavoury about arguing that in certain complex markets — ones in which empirical evidence shows that a significant number of consumers may not be able to handle the complexity of calculations and are likely to underestimate their risk (credit markets being typical of this) — it is better to let people make potentially serious errors, even to the point of loss of their financial autonomy (a situation gravely impacting on their well-being including their freedom of action) on the basis that their freedom to make mistakes is deemed to be more important. This sounds like a form of ‘let them eat cake’ paternalism; Sir Humphrey Appleby would be impressed by the courageousness of suggesting it.

The second crucial point on learning is that there are some things that people do not seem to learn — or rather, humans exhibit what Daniel Kahneman (2002) has termed ‘slow learning’. This is not a matter of intelligence, it has to do with how we process information. Frederick’s (2005) work is probably the best illustration of

this, including examples where highly financially-literate people, such as MBA students and graduate economic students, still tend to make particular sorts of errors. Some of these errors relate to people responding intuitively (people give a spontaneous first-impression answer) to a task that requires cognitive reflection and at other times because they miscalculate or misunderstand probabilities due to the way these are framed.

A classic example of a Shane Frederick cognitive reflection task is:

If it takes 5 machines 5 minutes to make 5 widgets, how long would it take 100 machines to make 100 widgets? (Frederick 2005, p. 11)

Large numbers of people answer 100 minutes; but with further thought, the answer is of course 5 minutes.

Experts, such as medical experts, make not dissimilar cognition errors and also miscalculate intervention options based on how the probabilities are presented or framed (Kahneman and Tversky 1981).

Knowing these cognition problems, and the propensity of even highly-trained individuals to make such errors in reasoning, a hopeful and simplistic reliance on consumer learning could easily result in poor quality and ineffective public policy. Further, people cannot learn if they do not actually know they have made a mistake, which is the case in a number of market transactions.

On a related point, government policy making, in seeking to provide disclosure to help consumers learn to make better decisions, has to deal with what has been termed ‘disclosure fatigue’. Often, when one detects market failure, our policy response is to require that more information be given to consumers to overcome that failure. Disclosure in financial advice and laws in relation to what must be provided in prospectuses are just two recent examples where users may be disempowered rather than empowered by disclosure rules — that is a matter amenable to testing empirically.

The behavioural economics work on information overload shows that framing and other techniques of information disclosure can be improved in many instances so that consumers can absorb information more effectively and thus do their part in driving competition and greater efficiency in the market. Clearly, lengthy treatises of disclosure that in effect create information overload or — as in the Lacko and Pappalardo (2004) study described in Joe Mulholland’s paper — that focus attention on less crucial information to the detriment of the consumer’s attention to more important information, can easily result in poor-quality policy outcomes.

It is of interest to note a recent interim joint publication by the UK Better

Regulation Executive and National Consumer Council (2007) (the equivalent of Australia's Office of Best Practice Regulation) on information disclosure. This study examines the interference with consumer empowerment, rather than its enhancement, by a failure of government policy to consider adequately the ways in which information disclosure rules actually affect real consumer behaviour in markets. While the co-authorship is in itself to be noted, it is not surprising to find an agency with responsibility for better regulation engaged in research about how information can be effective or ineffective in producing competitive outcomes in the market. From such an agency's perspective, ineffective information disclosure rules are the worst of all results — costly for business and bad for consumers.

To conclude on the learning issue, policy consideration of these types of matters requires much more sophistication and nuance in respect of what people can and cannot learn than is proposed in this paper. The lessons from behavioural economics are that good public policy will use a reasonable concept of people's cognitive abilities and computational capabilities.

Contract terms

Using sensible concepts about consumers' cognitive abilities is one element at the heart of the unfair contract terms discussion.

While advocating no particular position in relation to the introduction of unfair contract terms law, it is plain that people do not read 100 or 200 clauses of fine print terms (this would undoubtedly be verified empirically if one wanted to use the 'eye tracking' research methods suggested in the Mulholland paper). From what is known, consumers concentrate on price and key features of their purchases rather than on the fine print terms. That is sensible and rational in general terms for both competition and consumer outcomes.

Given consumer reactions to information overload, one can only begin to imagine the increase in transaction costs in the economy if every consumer examined every contract term in detail. Furthermore, it is not clear that one would understand the terms anyway. This point was made eloquently to me in 1991 by a retired judge of the NSW Supreme Court in relation to his retirement village contract. The judge was in a serious dispute with the management company of the village. He had read all of the considerable number of clauses in the contract and estimated that there were some 30 clauses where it was quite unclear and uncertain what they would mean in practice. Furthermore, such clauses appeared to be contained in most of the contracts he examined. The opacity of contracts and the resulting information asymmetry lends itself to a categorisation of contracts as an Akerlof (1970) lemons problem: significant deadweight loss is a likely result if consumers cannot transact

with reasonable confidence about the quality of their purchases, where quality in this case is defined as ‘no unexpected nasty surprises in contracts’.¹ Although it is an unwelcome comment, it appears to be peculiarly nonsensical for consumer affairs officials to give consumers advice to ‘read the fine print terms’ — a form of ‘do as I say rather than as I do’ advice which seems rarely to be followed by the individual giving it.

A second important point is that we live in a democracy. If the majority of citizens (who undoubtedly feel they have better things to do with their time than spend it reading fine print terms) would prefer to have expert government officials and expert judges look at contracts and eliminate, after extensive consideration, what appear to be unfair or anticompetitive clauses (clauses which allow for the exercise of micro-market power, an expression used by Sir John Vickers (2003) in his Keynes Lecture) — even if these experts are overconfident and suffer from behavioural biases like all humans — that is their right as citizens. That is not paternalism; that is a principal-agency arrangement.

Concluding comments

In the following closing comments, although the emphasis is specifically on consumer policy, the implications are relevant for other policy areas as well. Further, it is important to touch on the implications of behavioural economics for institutional frameworks — an issue raised by Gary Banks in his introductory comments.

Two preliminary points

When consumer sovereignty is impeded — from whatever source (competition restrictions, information problems, behavioural biases) — the market will be subject to market failure and outcomes are less efficient. Our markets rely on consumers to drive competition with the resulting benefits to our societies including the contribution to productivity. The point of a free market is not ‘the free market’; the point is that this economic institution is shown to often best satisfy consumer wants at least cost. But when market failure exists, societies, through their governments, consider regulatory intervention, soft or hard, and whether one can get the benefits of more effective markets given any regulatory costs. That task involves no assumptions about benign governments or benign politicians or altruistic public servants, and no relaxation of parsimony in intervention. Depending on the nature

¹ Empirical testing raises strong questions about whether people detect and/or understand the relevance of information asymmetries or if, rather, the default of trust is the norm. See for, example, Gilbert, Tafarodi and Malone (1993) and Malmendier and Shantikumar (2007).

of the intervention, the results could be as likely to increase choice as not.

One should also note that behavioural economics is not particularly new in economic terms — much of the work of Schelling, Kahneman and Simon is decades old; and if one counts Adam Smith's *Theory of Moral Sentiments* (1759) as part of the literature, then behavioural economics is hundreds of years old (Ashraf, Camerer and Loewenstein 2005). What is new, is its application to policy. Further, there is much less antagonism between behavioural and more conventional economics than some infer. Part of the project at the OECD, which was mentioned earlier, is to see how government policy makers and regulators can use both conventional and behavioural economics effectively for consumer policy — and often, but not always, the two analyses lead broadly down the same path.

Institutional frameworks

A logical consequence of knowing about behavioural economics insights is implied by Joe Mulholland's paper. Consumer policy needs to be conducted very differently from how we have conducted it in the past. Perhaps a quite fundamental change is required: to provide for adequate research into the problems; to ascertain how people are likely to respond; and to test what we are about to do before we do it — and perhaps not do it. There is not currently the institutional frameworks or capacity to carry out this work in consumer policy. The following decision tree (figure 1.1), a draft created for the OECD project on Economics for Consumer Policy (bearing in mind that the draft can be expected to change in some specifics as the Committee works with the model), implies a research capacity that does not currently exist in Australia or many other countries for that matter.

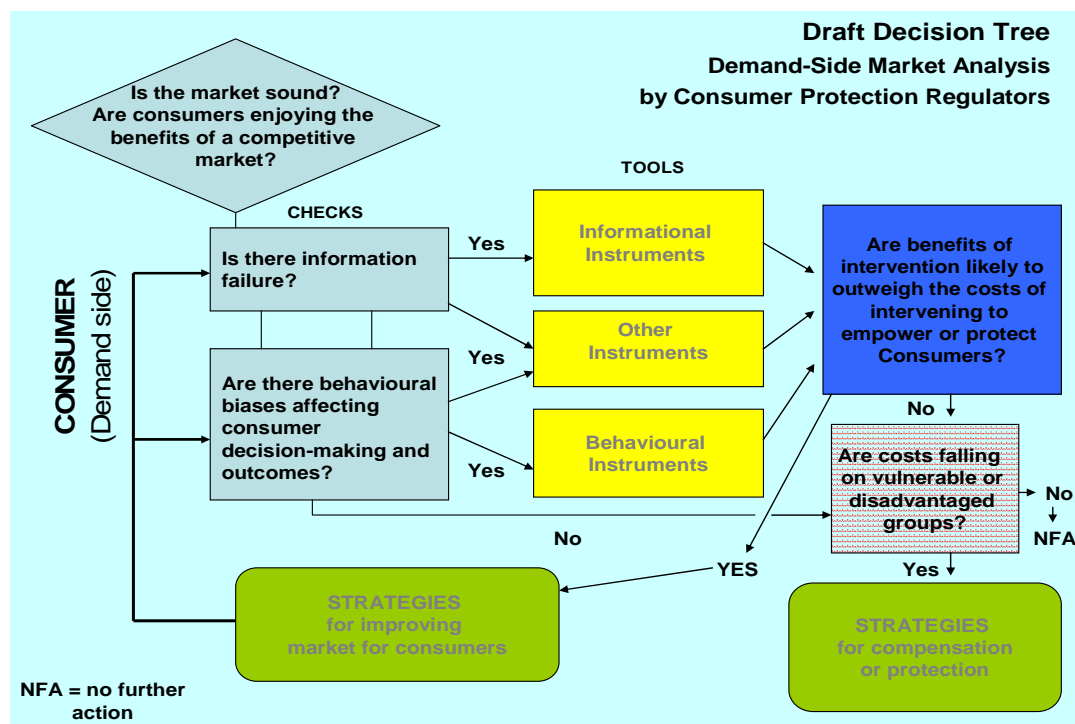
Even if the institutional capacity were built, one should not presume that behavioural economics, or behavioural sciences more generally, will provide absolute certainty about how a policy might work. What can be done, however, is to eliminate consumer policies that are going to fail or be less effective, and concentrate on developing policies that are more likely to succeed.

Take for example the illustration of the difference in policy design between New Jersey and Pennsylvania in seeking to reduce full-scale litigation related to automobile accidents (Johnson et al. 1993). The crucial factor is that Pennsylvania used as their default the full right to sue, while New Jersey used as their default no right to sue with a lower premium — consumers needed to opt in to retain the full right to sue. The rest of the offer to consumers was basically identical. The results were that 75 per cent of people in Pennsylvania retained the full right to sue, while only 20 per cent of New Jerseyites did. This is a dramatic real-world illustration of the ease with which policy success or failure can be created by taking into account,

or overlooking, behavioural issues.

Figure C.1 **Demand-side market analysis by consumer protection regulators**

OECD project on Economics for Consumer Policy draft decision tree



Data source: OECD (2007).

A further and recent practical example of the appropriate use of defaults by a government agency in this country comes from the Australian Taxation Office (ATO). With the recent major changes to superannuation arrangements in Australia, one crucial element is the new requirement that people must provide their Tax File Number (TFN) to their fund. The ‘penalty’ for not providing a TFN is substantial — the person suffers a significantly higher tax rate plus much more limited contribution opportunities. The ATO identified some four million accounts without TFNs and, further, identified about 2.5 million ‘hard’ matches — a clear link where the citizen could accurately be matched by the ATO to their superannuation account. Letters were sent out to people who did not have TFNs quoted to their superannuation fund urging them to correct this. Crucially, where the ATO had a ‘hard’ match, the default was set as follows: people were required to provide their TFN to their fund, but, they also had 28 days from the date of the letter to contact the ATO if they did not want their TFN passed on by the ATO itself. This is a brilliant use of a behavioural default. The ATO, in recognising people’s likely behaviour — that is, the great majority of citizens would have failed to respond despite the financial damage involved — ensured that this ‘mistake’ would affect

far fewer people and, frankly, would create far less mayhem politically when the financial consequences became evident.

Two conclusions

A crucial point to understand in the discussion of behavioural economics research is that the implementation of policy already makes choices: public servants are choosing defaults; choosing framing elements; and are already engaged in eliciting particular consumer or citizen behavioural responses to their policy interventions — even if this is being done largely in ignorance. To those who argue that behavioural economics cannot be applied to government policy because of the complexities involved, one must ask: what is so difficult about testing an intervention (whether the consumer response is entirely understood or not)? Why would we not want to do better in creating more effective interventions when we choose to intervene to assist consumers? Why would we not want to know how consumers will actually behave in response to a policy initiative in order to better measure the benefits and costs of such an initiative?

The final point is a rather obvious one: governments do stuff! Politicians do not see their jobs as being elected to do nothing. It is in our interests as citizens that when our democratically-elected lawmakers decide to act, whether that is an intervention in the market or some other institution, the analysis of the problem and the shape and implementation of policy is more likely to deliver the outcomes that are desired. Behavioural economics will be invaluable for that.

Public servants, as the key policy advisors to elected governments, need to be able to argue effectively, with elected officials, that consumer or citizen responses to policy initiatives or interventions are more complex and unpredictable than had been assumed, and that it is important to get it as right as possible. It will often be necessary to test policy interventions because policy makers in the public service and politicians are subject to exactly the same biases as others — they are overconfident, they overestimate the efficacy of the policies they are proposing, and so on. But not for a moment should anyone make the naïve assumption that consumer policy discussions can somehow not involve normative questions about what is best for consumers or that governments are not going to act when under public pressure.

In their position paper to the US Government, delivered at a Boston Reserve Bank conference on behavioural economics, Benjamin and Laibson gave the following view:

In most cases, governments should run small-scale field experiments to evaluate the consequences of new policies. Of course every government comes into office with a

sense of urgency and is likely to resist the idea of waiting for a year or more to know the outcome of a field experiment. We think that in most cases politicians should swallow hard and accept such delays. (Benjamin and Laibson 2003, p. 32)

Dealing with political risk is difficult.² In a democracy, political risk is inherent as it is with other less attractive forms of governance. Nevertheless, in a democracy one has the opportunity to build regulatory governance institutions and frameworks that enable political influence to be harnessed toward an analytical and thoughtful process rather than a knee-jerk reaction to an immediate problem. That is neither a recipe for inaction nor a recipe for inattention to consumer problems; it is a recipe for rigour.

² Political risk in this context is not the risk to a politician of not being re-elected, but the risk of a political intervention — usually to try and solve a problem causing political angst — with no or little consideration or analysis of alternative policies and likely effects.

Discussant — *Henry Ergas*¹

CRA International

There is much to agree with, and little to disagree with, in these papers. I am therefore in the fortunate position of being able to build on the excellent work that Joe Mulholland and Chris Field have done in considering the implications of advances in behavioural economics for policy and specifically for consumer protection. In doing so, I want to make three basic points, which are:

1. A crucial difference between the laboratory environment in which the basic advances in behavioural economics have been obtained on the one hand, and actual economies on the other, is that in actual economies there are firms as well as consumers. Those firms have incentives to seek to realise the gains from trade, and when cognitive limitations on consumers prevent that occurring, they will have incentives to innovate around those limitations.
2. This means that many seeming difficulties in consumer choice, including those highlighted in behavioural economics, are remedied by market forces; given that regulation also involves costs, reliance on consumer protection policies should only be considered when those self-remedial features of markets are highly likely to fail.
3. There are instances where that test will be met — that is, where potential gains from trade will not be realised in equilibrium. The simplest such instance relates to fraud and other forms of extreme misrepresentation. Most of the other cases that have received attention, however, do not seem especially robust and do not alter the view that would be reached by a more traditional analysis.

Interpreting the results of behavioural economics

In interpreting the key findings of behavioural economics, it is important to note that many of those findings have been obtained in laboratory settings. This is especially so for some of the well-publicised results on seeming departures from the canonical model of rational decision-making (which I will refer to as the ‘rational actor’ model), including the findings about inconsistency in preferences and the

¹ Regional Head, Asia-Pacific, CRA International. The views expressed in this paper are my own and do not necessarily reflect those of CRA International or of any of its clients. This paper was prepared for the Roundtable on Policy Implications of Behavioural Economics held by the Productivity Commission on 8 and 9 August 2007.

roles of anchoring, framing and loss aversion in the decision-making process.²

There is a crucial proposition in the philosophy of science, usually referred to as the Duhem-Quine problem, which is highly relevant to the evaluation of those results. That proposition states that any experiment *jointly* tests for a hypothesis and a set of background conditions associated with the experiment — for example, in terms of the measurement instruments used, the ambient conditions in the laboratory and so on.³ The inferences drawn from the experiment must therefore refer both to the hypothesis and the conditions under which it has been tested — for example, in saying that a material, *when tested under particular circumstances*, is found to act in particular ways, which may or may not be consistent with a wider theory.

The Duhem-Quine problem is important in economic experiments because the relevant hypotheses are inherently difficult to test. For example, assessing whether preferences over lotteries are transitive requires some way of eliciting truthful revelation of certainty equivalents, which cannot be done without an intervening technique, such as the widely-used Becker-de Groot-Marschak mechanism.⁴ As a result, good experiments in economics involve highly-stylised, controlled environments, in which the researcher tries to make formal and explicit such background factors as the selection and motivation of the subjects, the extent of communication between them, the information provided, the techniques used to elicit outcomes, the duration of the experiment and the manner in which the data were recorded. A robust result from such experiments is one which has been found to persist in the face of changes in these background conditions.⁵

The Duhem-Quine problem is one of several reasons why the claim that behavioural experiments ‘disprove’ conventional economics is an egregious instance of ‘naïve falsificationism’. But even putting that aside, there are significant implications for the attempted generalisation of experimental findings to the world outside the laboratory.

In particular, before generalising from the laboratory to the external world, it is crucial to ask in what relevant respects the carefully-controlled conditions that

² A convenient summary is in Rubinstein (2006).

³ A concise statement of the Duhem-Quine problem and its implications for Popperian falsificationism can be found in Hausman (2003).

⁴ In a Becker-de Groot-Marschak elicitation, a subject is asked to state a reservation price for a lottery, which is then auctioned. If the auction price (which may be the result of a draw by the experimenters from a uniform distribution) exceeds the reservation price, then the subject is paid the reservation price; otherwise, the lottery is drawn and the subject receives the outcome of that draw. Faced with this procedure, truthful revelation is a dominant strategy for a rational decision maker.

⁵ See generally Guala 2005.

characterise formal experiments differ from the inherently more complex environment of actual economies. This is a question experimenters have naturally given considerable thought to, with their focus being on two sets of factors.

The first are those factors that affect the salience of the situation to the subject — for example, in terms of the extent of what is at stake. It seems reasonable to suppose (and indeed is central to the ‘rational ignorance’ model of information acquisition) that a decision-maker considering a choice in which much is at stake will act differently from an experimental subject undertaking a laboratory exercise for a few dollars an hour.

The second relevant set of differences goes to the scope for learning, including through interaction with others taking similar decisions. Here, too, it seems reasonable to suppose that a decision-maker faced with say, a complex choice between uncertain options, will find it more natural to deal with that choice in a manner consistent with Expected Utility theory after multiple transactions (perhaps associated with investing in options markets) than will an experimental subject on his or her first exposure to the curious compound lotteries used to test Allais’s paradox.^{6,7}

These differences are obviously highly significant and they have led behavioural economists to seek to vary their experimental design in ways that better reflect choice in non-laboratory conditions.⁸ They have also led some scholars, reviewing those efforts, to doubt the external validity and practical relevance of many of the ‘contrarian’ results that behavioural economics has obtained.⁹ However, it seems to me that the real difficulty with these results — especially in terms of their implications for policy, including in the area of consumer protection — lies elsewhere.

⁶ The Allais paradox is a way of showing that a decision-maker orders uncertain prospects in a way that is inconsistent with the postulate that choices are independent of irrelevant alternatives. Basically, it is this postulate that makes it possible to represent preferences over uncertain prospects as a linear function of the utilities of the basic outcomes, that is, as the expectation of utilities. See for example, Rubinstein (2006, pp. 95–96).

⁷ This expectation is consistent with the results of the laboratory experiments — see for example, Conlisk (1989). The same point can be made about findings of decay effects in contributions to repeated public goods games — behaviour converges to a lower level of contribution (that is, to greater self-regarding behaviour) over time.

⁸ See for example, Camerer, Hogarth (1999).

⁹ See, for example, Binmore (1999). A parallel line of criticism centres on the *ad hoc* nature of many explanations in behavioural economics, and the seeming lack of a unifying, parsimonious, approach to understanding economic behaviour. See, for example, Elster (1986).

The difficulty with the behavioural results

To understand this difficulty, it is important to note that departures from rational choice usually imply an inefficiency, that is, a wealth reduction.¹⁰ This is especially so for those instances in which the ‘behavioural failure’ arises from bounded rationality and the consequent reliance on heuristics that do not rank alternatives in a way that make the decision-maker as well off as he or she would be if gathering and acquiring information were less costly.¹¹

That failure to properly rank alternatives means that gains from trade that could be obtained, if decision-making were easier, are foregone. Under normal conditions, this causes a loss of surplus to both consumers and producers, giving both parties incentives to seek options for improving on the transactions that are struck. As a result, there are strong incentives for firms to innovate in ways that improve on the transactional process, reducing the efficiency loss associated with the decision-making constraint.

This kind of innovation — in which an agent ‘internalises’ the potential gains from improving on individual decision-making — is almost completely absent in experimental settings, where the decision-making context is treated as given.¹² However, they are of fundamental importance in actual economies and, in my view, mean that many consumer protection concerns related to decision-making limitations are misplaced. More specifically, they help ensure that when there is scope for better decision-making, that scope is to some extent exploited, even if

¹⁰ The most extreme case of this is obviously that of violations of transitivity that give rise to ‘Dutch Books’ — see Yaari (1998). The fact that Dutch Books are not observed in practice (or at least not for long!) casts some doubt on the extent and severity of transitivity violations.

¹¹ Of course, it is by no means inevitable that reliance on heuristics will lead to sub-optimal choice. For example, the heuristic ‘expand output until marginal revenue equals marginal cost’ will often give a good approximation to profit maximisation. For an example of ‘close to perfect’ heuristics, see Gigerenzer, (2004, p. 398). Equally, the world’s best chess masters do not follow rigid rules, but rather implement what are often visual heuristics: for example, Watson (1998) notes in his highly influential *Secrets of Modern Chess Strategy* that ‘[m]any changes have taken place in modern chess but the forerunner to these changes has been a philosophic notion. I call this notion “rule-independence”. It is simply the gradual divestment on the part of chess-players of the multitudinous generalities, rules and abstract principles which guided classical chess, and which still dominate our teaching texts. Furthermore, a rejection of the very notion of a “rule” has taken place, in favour of a pragmatic investigation of individual situations. A “feel” for positional chess is developed.’

¹² One of the few attempts to mimic the effects of this kind of innovation is the paper by Chu and Chu (1990). The authors introduce arbitrage into a money-pump game. Interestingly, they find that while subjects display preference reversals absent arbitrage, once they are exposed to arbitrage their preferences converge towards consistency with ‘rational actor’ norms.

consumers themselves cannot improve on their underlying cognitive skills.¹³

Some examples

This point can be illustrated by considering a frequent source of concern — that consumers find it difficult to understand complex price structures, with the result that firms have incentives to increase search costs by ‘muddying the waters’. Experience suggests that this is only partially true — for attempts at ‘muddying the waters’ create incentives for one or more suppliers to differentiate themselves by introducing a price structure that is simpler and hence more attractive.

The Australian telecommunications market is a case in point. The statutory duopoly period (from 1991 to 1997), saw a proliferation of complex pricing plans, especially for STD, making it very difficult for consumers to evaluate ‘value for money’, and facilitating a degree of tacit pricing coordination between Telstra and Optus. With the end of that duopoly in 1997, AAPT introduced a greatly simplified call-charging scheme, called SmartChat, in which STD call charges were capped. The competitive advantage that simpler, clearer pricing provided to AAPT began a far-reaching simplification of pricing schemes in the industry, which has continued to the present day, with ‘all you can eat’ schemes bundled across multiple services coming into widespread use.

Equally, in aviation, competition between Ansett and Qantas involved complex price discrimination, structured around restrictions on the date, day and time of travel, including through minimum stay and Saturday night requirements. The relatively high margins this permitted for efficient supply provided opportunities for competitive entry, with Virgin — much like Value Based Airlines in other countries — introducing a far simpler pricing scheme, in which there were no minimum stay restrictions and prices were set mainly according to time of purchase. Faced with this form of competition, Qantas responded by greatly simplifying its own pricing, and what is known of Tiger’s proposed pricing is even simpler.

In retailing too, sales and other specials serve as useful forms of price discrimination, but also increase consumer search costs (indeed, that is an important part of how the price discrimination works). Woolworths in grocery retailing, Big W in general merchandising and Bunnings in hardware and do-it-yourself goods, broke this pattern and adopted an ‘Everyday Low Prices’ model, in which

¹³ Of course, this does not mean that internalisation is a feasible response to all cognitive limitations. For example, the problems associated with ‘rational addiction’ may not lend themselves to an internalisation response. Indeed, profit-maximising firms can have incentives to exploit vulnerability to addiction.

prices are set on the basis of low, but stable, mark-ups. The result has been a significant increase in their market share and generally in their relative profitability.

Finally, in retail banking, the 1990s saw substantial increases in the level and number of fees and charges imposed on consumers. This reflected the unwinding of previous cross-subsidies, in which interest margins had provided the primary means of cost recovery. However, while the shift from interest margins to direct fees and charges was largely cost-reflective and welfare-improving, the resulting price structures were complex and confusing, and exposed consumers to bills that were difficult to predict and understand. Reflecting this, in July 2002, ANZ introduced a hugely successful ‘all you can eat’ retail transaction account, and this was followed by NAB and Westpac in 2004, and by the Commonwealth Bank in 2006.

The implications for consumer protection policy

The crucial point in all of these cases is that decision-making technologies are not merely the work of consumers — they also depend on the action of firms. Quite regardless of market structure, profit-maximising firms¹⁴ have incentives to exploit otherwise-foregone gains from trade, including by improving the ability of consumers to act on their preferences.¹⁵ These incentives are likely to be strongest for the most efficient firms, as they have more to gain by reducing search costs.

These incentives need to be taken into account in considering the design of consumer protection policies. More specifically, it seems to me that a crucial factor in determining the appropriate scope of consumer protection should be the extent to

¹⁴ It is worth noting that I am assuming that firms are profit maximisers. I say this because when the notion of ‘satisficing’ came into widespread use, it was viewed as being of greatest relevance to the behaviour of business firms: more specifically, it was seen as an alternative to the more conventional goal of profit-maximisation. See, for example, three highly influential books published in the early 1960s: Cyert and March, (1963); Marris (1964); and Williamson (1964). Nowadays, in my view sensibly, we are far more likely to treat firms as seeking to maximise profits — in part because we recognise that much of what firms do, in terms of their internal organisation, aims at maximising profits ‘as best one can’, given constraints such as bounded rationality. It is also useful to make this assumption because most of those who view behavioural economics as justifying greater government intervention take it for granted that firms are profit maximisers.

¹⁵ Whether the incentives for this kind of innovation to occur are stronger in more competitive markets is a complex issue. Generally, greater competition will reduce appropriability by the innovator, and hence reduce the extent of innovation; at the same time, greater competition may ‘force’ firms to innovate (partly so as to escape competition) and a greater number of rivals may make it more likely that any innovation will be attempted (a portfolio effect). The balance between these effects is not capable of being determined as a matter of theory and will depend on a range of factors and circumstances. See, for example, Aghion and Griffith (2005).

which potential concerns are ultimately self-remedying, in the sense that those concerns create incentives for efficient firms to innovate so as to ensure the fuller realisation of potential gains from trade. It is only where those remedial properties are highly likely to fail that regulation should be considered.¹⁶

When is this test is likely to be met? Given the constraints of time and of length, I will consider only three cases where these remedial properties may fail to hold: information asymmetries associated with misrepresentation; models in which consumers incur ‘hidden costs’; and finally, distortions in markets for time and risk.

Misrepresentation

One case where self-remedying properties are likely to fail arises when markets are distorted by misrepresentation, which in its extreme forms amounts to fraud. As with all information asymmetries, misrepresentation can give rise to allocative inefficiencies (as trades will not reflect accurate valuations of the goods being traded), as well as to productive inefficiencies (because consumer search costs are increased, production may be allocated to less rather than more efficient firms, and firms may waste resources either in lying or in trying to establish a reputation for telling the truth). In the extreme, of course, bad information drives out good, no firm has the ability or incentive to disclose truthfully, and the market disappears.¹⁷

These concerns underpin the standard neoclassical case for restrictions on misrepresentation — a case which it is easy to make in respect of the practice in its most egregious forms, but is less compelling when it comes to the likely more common practices of exaggeration and selective disclosure.¹⁸

Do the results of behavioural economics alter that case? In my view, they do not, for two sets of reasons. First, as cogently explained by Joe Mulholland, the same cognitive limitations that may impede efficient choice (and hence increase vulnerability to misrepresentation), can reduce the value of disclosure requirements, and indeed, make such requirements counterproductive. Second, as stressed by Chris Field, it is difficult to draw out from the multiplicity of results that characterise behavioural economics a standard that is sufficiently clear-cut to avoid the risk of serious regulatory error.

¹⁶ Even then, of course, any such action needs to be subjected to proper cost-benefit tests.

¹⁷ This is the extreme case of adverse selection, in which the market collapses, so that all the potential gains from trade are lost. See Akerlof (1970) and Hillier (1997). The other way of stating matters is to note that complete distrust is a self-enforcing equilibrium. See for example, Gambetta (1998).

¹⁸ See Trebilcock (1993).

Hidden costs

A more complex, but related, problematic equilibrium can emerge in markets characterised by ‘shrouded attributes’ — that is, situations in which some consumers, but not others, are unaware of hidden costs associated with certain products (such as cartridges for ink-jet printers and broadband charges in hotel rooms).¹⁹ In these situations, it may not be profitable for producers to disclose the hidden costs, so long as sophisticated consumers have the ability to avoid them while still buying the products, which are cheaper because of the ‘subsidy’ which naïve consumers provide.

While these ‘shrouded attributes’ models are elegant and at times suggestive,²⁰ they rest on strong assumptions. More specifically, as well as the conventional — and demanding — individual rationality assumptions required to solve games of this type,²¹ there is the assumption that no firm would gain a significant first-mover advantage by deviating from the ‘hidden costs’ strategy.²² This assumption seems quite inconsistent with the experience I have summarised above, where firms have derived significant innovators’ rents by being the first to exploit previously unrealised gains from trade.²³

Even putting these concerns aside, the policy implications of ‘shrouded attributes’ models are far from clear. In effect, they raise the standard trade-off between assisting the less-informed consumers on the one hand, and rewarding those consumers who invest in information on the other. Of course, there are cases where the nature of information as a pure public good means that duplicated search amounts to nothing but waste,²⁴ but there are also many cases where private

¹⁹ See Ellison (2005) and Gabaix and Laibson (2006).

²⁰ See for example, the application of such a model to residential mortgages in Campbell (2006).

²¹ These assumptions — which are well explained, and their implications examined, in Kreps (1990) — are of course at odds with many of the results of behavioural economics.

²² Campbell (2006), for example, assumes that firms have no form of intellectual property protection, or that that protection is so weak that there are no innovator’s rents. Additionally, this type of model tends to be highly sensitive to the precise population shares of ‘sophisticated’ and ‘naïve’ consumers, to the willingness to pay of these respective groups of consumers and to search costs.

²³ Interestingly, economists very often assume that firms cannot make durable unilateral gains by deviating from a coordinated pricing strategy because pricing strategies are readily copied. (This underpins the concept of a ‘quick response equilibrium’, such as that embodied in the kinked demand curve.) In commercial reality, however, devising and implementing pricing strategies is often extremely complicated, and involves changes in systems, in training and billing, accounting and auditing arrangements. As a result, major changes in price structures are often very difficult to copy, and especially to copy well and quickly.

²⁴ Barzel (1982) discusses these instances but concludes that when the relevant conditions apply,

investment in information is socially valuable, because it helps guide the price discovery process to ever-changing fundamental values. In these latter instances, efforts at improving the position of less-informed consumers can reduce the return other consumers make by investing in information, and hence erode the quality of price discovery and welfare overall. This trade-off raises especially difficult issues for consumer protection in securities markets; suffice it to say most economists would place considerable weight on the need to ensure disclosure requirements do not eliminate incentives for costly information acquisition, while still encouraging widespread participation in the relevant markets.²⁵

Markets for time and risk

A third and final case arises in respect of markets for time and risk, that is for savings (consumption smoothing) and for insurance. It is here that some of the greatest challenges to the ‘rational actor’ model are to be found, with findings that consumers may, for example, over-insure in some respects, while under-insuring in others.²⁶ In contrast to the instances discussed above — where the concern is that misrepresentation may be an equilibrium strategy for firms — the factor that most seriously impedes efficiency in these markets is the likelihood of misrepresentation by consumers, that misrepresentation taking the form of adverse selection and of moral hazard.

While the issues concerning the nature of equilibrium in markets for time and insurance are highly complex and go well beyond traditional concerns of consumer protection, the failure to properly understand the factors that shape those markets has, in my view, been a source of error in consumer policy.

Take, for example, our experience with hire-purchase legislation from the mid-1950s on.²⁷ At a time when banking regulation served to severely ration

producers will take measures to avoid wasteful duplication of search.

²⁵ See O’Hara (1995) and Harris (2003). The need to protect the returns on investment in information, and the importance of maintaining a mix of investor types in the market, can justify limitations on disclosure requirements, such as allowing reduced transparency (that is, somewhat reduced pre- and post-trade disclosure) for block trades.

²⁶ See Cutler and Zeckhauser (2004) and Pauly (2007). At the same time, hyperbolic discounting, ‘weakness of will’ and myopia may lead to the choice of inefficient time paths for savings and consumption, especially in the presence of tax and benefit distortions. See generally Diamond (2003) particularly chapters 3 and 4.

²⁷ Hire-purchase existed in Australia from the 1920s but expanded rapidly in the consumer boom of the 1950s. I am grateful to Professor Greg Patmore of the University of Sydney for making available to me an advance copy of Knowles, Patmore, and Shields (2007) ‘From hire purchase to property development: the rise and demise of the industrial acceptance corporation

consumer access to credit, policy sought to impose ‘fair’ trading terms on suppliers of hire-purchase, on the pretext that ordinary consumers — especially those from lower income groups — could not understand the terms of the contracts they were entering into.²⁸ As well as failing to address the underlying distortion — which lay in the system of banking regulation — these interventions mainly led to the rationing of hire-purchase, thereby further restricting consumer credit availability. Additionally, they made it more difficult for hire-purchase to compete with credit cards, once these became available in the 1970s.²⁹

More recently, concerns have been expressed about sales of extended warranties on consumer appliances, those sales typically being made by the retailer, with the issue being whether those warranties are reasonably priced from an actuarial perspective. These concerns seem poorly thought-through. In effect, assume consumers as a class generally wanted extended warranties. In that event, there are no obstacles to manufacturers supplying them.³⁰ However, if only some consumers want an extension on their warranty, then it may well be more efficient for those extensions to be effected as a separate transaction at the time when the appliance is purchased. But because that transaction will only affect a subset of purchasers, it involves a greater risk of adverse selection, and hence, even in a competitive market, will involve much higher loadings than are built into the warranty that is bundled with the appliance itself.

Conclusions

The work of behavioural economists has undoubtedly enriched our understanding of decision-making behaviour and highlighted differences between that behaviour and the canonical economic model of choice. However, there are serious risks involved in extrapolating from the settings in which those advances have been made to actual economies, in which agents can and do innovate around cognitive limitations. As a result, regulation, including through consumer protection measures, should only be considered when those self-remedying properties of markets are likely to fail. This

in Australia, 1926–1977’ forthcoming in *Accounting, Business and Financial History*.

²⁸ The crucial step was the legislation enacted by the New South Wales Labor Government in 1960, which capped the charges that hire-purchase providers could impose. That legislation set a standard that was soon adopted in other states.

²⁹ The trading banks began to issue Bankcards in 1974, initially to their best customers. This caused an effective deterioration in the quality of the pool of consumers available to hire-purchase providers, so that the restrictions on the charges they could set became even more distorting.

³⁰ Barzel (1989, pp. 86–88) provides an excellent analysis of warranties, from the somewhat contrasting perspective of a moral hazard (unpriced attributes) model.

is generally true for instances of fraud and egregious misrepresentation, and may also hold for ‘pressured sales’ (though that case has not been considered here³¹); but great caution is needed before concluding that the findings made in behavioural economics justify extending consumer protection regulation far beyond those instances.

³¹ Another complex case that would be worth considering is that of policies that help ‘crowd in’ one of multiple possible equilibrium outcomes. For example, it is conceivable that smoking is an equilibrium outcome when many people do it, but individually costly when few people do it. Policies that shift the equilibrium could, in cases such as these, create gains — see, for example, Glazer and Rothenberg (2001, p. 89). However, there is also the issue of how this kind of manipulating of preferences can be justified, which obviously raises a wide range of issues.

General discussion

Discussion opened with the comment that, while the importance of supply-side problems in competitive markets had been acknowledged, insufficient attention had been paid to problems on the demand side. Referring to Chris Field's citing of Caplan, one participant made the point that the efficiency argument in favour of regulating consumer affairs is that if people think that markets are unfair, they could end up avoiding entering into any transactions. It was also noted that two of the examples used in Henry Ergas's paper might need revising:

- It could be argued that telecommunications consumer packages were again becoming more complex as phone services are bundled with internet, mobile and pay TV services.
- Aspects of bank charges were still complex, unfair and shrouded and therefore not subject to competitive pressures.

Chris Field's emphasis on individual liberty was questioned: one poor decision (for example, in saving decisions) might result in poverty — and 'poverty certainly deprives liberty, and perhaps there is a degree of paternalism, as in superannuation, which actually preserves liberty'. One speaker was concerned that there had been a disposition to depict behavioural economics as being in favour of regulation, and neoclassical economics as against, and that Chris Field's paper was an argument against regulation in general, rather than as a specific treatment of behavioural economics.

In respect of disclosure as a policy tool, one speaker noted the paradox that the standard response to the recognition that people do not use information very well is to try again, repeatedly and with greater refinement; whereas the message from behavioural economics is that disclosure itself can make the problem worse. Can the paradox be resolved?

Joseph Mulholland, addressing the disclosure issue, noted the possibilities of further psychological research on the mechanics of information processing (for example, eye tracking) that could be used to complement more traditional survey techniques such as copy tests.

He also touched on motivation: policy makers need to motivate people to read contracts, and they need to motivate companies to both provide information that

consumers need, and compete on the basis of that information.

Louise Sylvan was concerned that an antagonistic relationship between behavioural and conventional economics was being set up. Referring to *The Theory of Moral Sentiments*, she observed that Adam Smith did after all write two big books, not just one. Granted that everybody wanted to make markets work, and that markets will over time tend to correct, it nevertheless needs to be asked, ‘How long will that [market] take to correct and what happens in the interval to consumers ...?’.

Henry Ergas agreed that correction is neither inevitable, nor always swift. But the full relationship between consumers and suppliers needed to be considered: suppliers have very strong incentives to meet their markets. Adjustment in an open and innovative market will presumptively be more efficient and effective than what would be imposed by fiat.

PART D

REFLECTIONS FOR PUBLIC POLICY

6 Behavioural economics and public policy

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I have found the day's proceedings — and the days spent reading the papers beforehand — to be a fascinating exercise, at various different levels. Fascinating and, I confess, challenging to the point of discomfort. In what follows I shall try to indicate why. I shall also try to indicate what I think the policy implications of the behavioural approach are.

To begin with, by way of mild self defence, I want to draw a distinction between academic economists and our policy counterparts. I think this is an important distinction and often underestimated on both sides. To overstate the contrast a bit, the primary ambition of the academic is to be 'interesting'; the primary ambition of the policy advisor is (or ought to be) to be 'right'. Academic virtues are creativity and imagination and ingenuity. We are, to use Adam Smith's phrase:

... men of speculation ... whose trade it is, not to do anything, but to observe ... and who, upon that account, are often capable of combining together the powers of the most distant and dissimilar objects. (Smith 1976, p. 18)

I do not want to imply that, by contrast, policy maker/advisors are dull dogs for whom ingenuity and creativity are anathema. But whereas academic progress is often secured by means of profitable errors, errors of any kind are probably not something to which policy should ever aspire.

There is one important implication of this difference. Models of the kind economists use are *tools*. Such models involve abstractions; and both the level of abstraction and the precise nature of that abstraction ought to be chosen with an eye to the purposes the model is supposed to serve. The abstractions we make are in that sense strategic. Or they ought to be. Put another way, any appropriate 'theoretical construct' represents an optimal compromise between goodness of fit with the

phenomenon to be analysed on the one hand, and the austerity, parsimony and explanatory sweep of the whole endeavour on the other. Economics is distinctive (one might say notorious) among the social sciences for the heavy weighting it places on the latter criteria. We operate at a high level of abstraction and we are disposed to a ‘one abstraction fits all’ kind of strategy. This has many attractions — at least to economists, and especially to academic economists like myself. But we ought to acknowledge that the level of abstraction suitable for academic ‘speculation’ is not necessarily the same as that suitable for specific policy evaluation — that the logical coherence of the whole intellectual enterprise (by which I mean the connection between the recommendations in one application and those in another) is properly more highly valued by the academic than it is by the policy maker.

This difference is replayed in an even more marked fashion in the contrast between economics and psychology as disciplines. Economists have ‘big canvas’ aspirations. We desire to explain the world with a handful of axioms — the fewer the better, *ceteris paribus*. Alternatively put, we are prepared to give up quite a lot in terms of goodness of fit to have an austere, ‘parsimonious’, logically-coherent account of the social order.

As far as I can tell, psychologists are generally not like this. Their disciplinary habits are what I would call more ‘encyclopaedic’: that is, they accumulate large numbers of results, each pretty much *sui generis*, without any particular disposition to aggregate them into a single logically coherent story about the social order (or for that matter about the human mind). And, by and large, they are mistrustful of such generalisation beyond a pretty narrow range, when undertaken by others.

So when psychology meets economics, there are deep differences to be negotiated. At the very least, there is a very different set of preferences over the norms of good theory. At the limit, there is deep scepticism on the part of psychologists as to whether a general account of human action of the kind economists believe in, is at all possible — or can be anything other than a kind of fantasy in the face of ‘the evidence’.

It is not at all clear to me how to handle this kind of difference. And I am far from sure that the behavioural economics enterprise is successful in doing so. Often, it seems to me, the economist is inclined to take a set of psychological findings and develop from them a reasonably simple axiomatic model that encompasses and explains them all. The next step is to develop ‘interesting implications’ for a wide range of other phenomena, connecting up what look like similar circumstances to produce predictions for behaviour across a broad range. It is not just that psychologists do not have a similar instinct — and are generally suspicious of it. It is also that their findings are not offered with that purpose in mind — and it is not

clear to me that those psychology ‘results’ can bear the weight of the grand theorising to which we economists are prone.

When I say ‘it is not clear to me’, that is exactly what I mean. My instinct is to feel that the broad interpretative structure that economics offers, remains intact — and that the logic of relative prices and rationality still constitutes a very powerful principle of social analysis. But there are, to be sure, anomalies in this picture of varying degrees of seriousness — and the uncovering of those anomalies in specific cases is an important empirical exercise. Important, both for analytic and especially policy purposes.

Take, for example, the South African field experiment to which Eldar Shafir refers. A key finding here is that the inclusion of a picture of a smiling woman on an invitation letter significantly affects the take-up rate for an ‘emergency’ loan. As I understand those results, there is no claim that differential interest rates do not have the predicted effects — take-up rates are, *ceteris paribus*, inversely related to the interest rate charged. It is just that other things also matter — features, like the gender of the face pictured on the invitation letter, that on the standard ‘economic account’ ought not matter. Predictably, my economist’s instinct is to try to devise some account of why picture gender might matter — to enquire what the picture might be seen to be signalling (for example, greater preparedness to be accommodating and sympathetic in dealing with repayment ‘problems’) — rather than to treat the phenomenon as a kind of psychological prime. But even if we concede that no such explanation is at all plausible, and that there are behaviourally influential features that lie outside the scope of the economist’s standard models, what is the lesson? Less confidence in our *a priori* predictions — and greater modesty in advancing them? An acceptance that human beings are more complex than the *homo economicus* model would suggest? These are good lessons to learn, but they are hardly grounds for rejecting, or even suspending, the ‘economic way of thinking’ as a useful means of trying to impose intellectual order on the complex social order we observe.

Perhaps at this point, it would be useful to locate my own work in relation to the behavioural economics enterprise. These days, I am no particular friend of *homo economicus*, and indeed have long believed that economics should be engaged in an orderly retreat from that particular formulation of human nature. At the same time, I remain a determined fan of what I would call the ‘rational actor grammar of argument’ — and I think that the application of that grammar of argument is what is required to make the retreat from *homo economicus* ‘orderly’. To be more specific, in my own work, I have tried to expand the range of considerations that ‘enter the utility function’ (as we might put it): first, to include morality (Brennan and Hamlin 2000); second, to include esteem (Brennan and Pettit 2004); and third, to include

expressive as well as instrumental considerations. This last element is a centrepiece in what has been a long-standing attack on the extrapolation of instrumental self-interested behaviour from market to electoral behaviour, something that still remains a predominant feature of so-called ‘public choice orthodoxy’. In various ways, all of these exercises have involved an application of the rational actor method. They can be construed as including things beyond wealth in the agents’ utility functions, rather in the Beckerian spirit as Mark Harrison earlier described it. It seems to me that Bruno Frey is right when he claims that the logic of relative price is an extremely potent explanatory tool, and basically I align myself with the project of imaginative use of that logic that his work represents.

Commentators sometimes complain that when faced with any kind of anomaly, economists just send the model back to the ‘neoclassical repair shop’, to ask what minimal adjustment to the utility function is required to explain or otherwise finesse the anomaly in question. This is taken by such commentators to be a disparaging observation. But it seems to me exactly the kind of response that we ought to expect. Present me with a puzzle and I will try to find an explanation! I will use my tool kit to see what light my tools might throw on the anomaly in question. This is not evasion — it seems to me rather to be reasoning in action.

So, for example, the extensive evidence emerging from the playing of the ‘ultimatum game’ admits various explanations: that agents have norms of fairness and as second-movers are prepared to pay something to punish first-movers who violate those norms; or that first-movers know that some agents are disposed to inflict harm and want to increase the cost to second-movers of exercising that option; or that agents are naturally benevolent but that their benevolence will increase if the possible price of not exercising it goes up. Of course, there are experiments that are designed to distinguish these cases, though my understanding is that to date no plausible general utility function that explains all the results has been found.

Certainly, it seems to me, the general spirit of relative price logic emerges from these results pretty intact. That is, the more the first-mover gives to the second-mover, the higher the price to the second-mover of exercising punishment (implementing a veto) and therefore the less likely punishment is to be imposed: first-movers seem to know this relative price theorem, or at least be quick to learn it.

I do not mean by these remarks to endorse a view that was occasionally expressed throughout today’s proceedings that we economists have nothing to learn from the ‘behavioural turn’ — that there is nothing new or relevant to our concerns in the psychological literature. That seems just false to me. Consider, for example, the experiments relating to ‘public goods’, ‘social dilemmas’ and ‘n-person prisoners’ dilemmas’. Here is a brief sample of the findings that are contrary to what standard

homo economicus reasoning would have led us to believe:

- Somewhere around 40 per cent of agents ‘cooperate’ in these experiments.
- The proportion cooperating is independent of whether the game is repeated or played on a one-off basis (in general, in repeated games, cooperation rates go down with repetition), and independent of whether there is a known or indefinite end-point.
- Cooperation rates are sensitive to pre-game communication between players, even where play is totally anonymous.
- Cooperation rates become quite high when independent punishment is allowed: that is, agents are prepared to pay something to punish players (much as in the ultimatum game) and this threat of punishment increases cooperation rates.

Of course, not all of the standard predictions are violated. If the reward from defecting increases, defection rates go up. And it is worth emphasising the simple point that, if 40 per cent of players cooperate, then there are still 60 per cent who defect. However, there are enough surprises in these results to give the economist pause. Whether the results would particularly surprise those who lack the benefits of an economic education is, perhaps, questionable; but the empirical claim (one which seems to delight non-economists) that economists defect more than others, has recently become a matter of contention and seems to be rather less clear-cut than originally claimed.

I have to say that I have found all these results interesting and significant, and I am sure that in various ways they have affected my professional attitudes.

In some ways, however, the most challenging results for economists are not those that relate to defection in social dilemma situations, but rather the multitude of factors that seem to influence behaviour systematically while having no ‘relative price’ status — at least, not without a very significant reconceptualisation of what relative price effects might capture. Among these results, I include those dealing with mood effects (of the Izen and Levin (1972) kind); ‘endowment effects’; and ‘framing’. In all these cases, matters that from a standard rational actor viewpoint ought to be epiphenomenal, turn out to be behaviourally quite significant. Of course, just how significant they are is itself an important empirical issue. So, for example, in the ‘endowment’ case, the statistic that Eldar Shafir quoted in relation to opt-in/opt-out organ donation schemes struck me as impressive: the difference between 14 per cent (for opt-in schemes) and 86 per cent (for opt-out schemes) is impressive. Of course, it may be that there is some explanatory power in the choice of schemes itself: a citizenry that is more supportive of organ donation would, one might think, be more likely to give electoral support for an opt-out scheme. Nevertheless, the difference is sufficiently striking that it is plausible to think that

the way in which different schemes assign the onus of participation exercises a considerable independent effect.

As to framing, I want to take two examples. The first is the claim that constitutes the core of Bruno Frey's 'crowding-out' analysis. The idea is that being offered money to undertake a task can trigger a shift to a quite different frame of reference. It is as if each individual has a number of utility functions contained in his brain: the one that is actually activated depends on the role that the agent sees herself to be playing — that of family member, or professional worker, or citizen, or whatever. The role of frames, on this picture, is to activate one 'role' or identity — with its associated utility function — rather than another. The kinds of considerations one counts as relevant under one such role may be quite different from the considerations that weigh under another role — and the behaviour that is induced may likewise differ. If offering material incentives changes the role under which the agent sees herself as operating, then 'relative price effects' may turn out to be perverse.

The second example I take from Eldar Shafir — in a manner that I hope he will not find objectionable. Recall that he commenced his presentation with a reference to the famous Milgram (1974) experiments. I am not sure what relevance those experiments have to anything that passes for behavioural economics, but reference to them does have a substantial framing effect. As Eldar emphasised, Milgram himself was able to demonstrate that his results were genuinely astounding, by asking distinguished psychologists to predict the outcome of the experiments before the results were known. In that way, we are encouraged to think that psychology can offer us lots of astounding conclusions — that our folk beliefs about human nature can be highly defective, and our established convictions about the way the social order operates become correspondingly unsettled. Actually, I think it would be unwise — and for that matter, somewhat alien to intellectual style in contemporary psychology — to extrapolate from Milgram's very striking and disturbing experiments to rather distant economic settings. But the Milgram results are certainly successful in getting our attention and making us more ready to accept that we have much to learn. Which of course we do. But, without putting too fine a point on it, the chief point of starting with Milgram was rhetorical. It involved a kind of framing — and we would be foolish to deprecate the power of such frames.

I choose this example not to be tendentious, or to try to undermine the force of the Shafir message by appeal to a contrary framing device of my own, but rather to make the quite different point that the claim that framing can have powerful effects is one that we all recognise in lots of familiar contexts, and one moreover that we often try to use for our own purposes — in giving Economics 1 lectures, for example. It would be somewhat surprising if the effects of association and

connotation that are so central in the rhetorical context were totally silent in the operation of markets, even if standard economists' models do not include them.

My approach to much in behavioural economics is in the same spirit. Many of the results strike me as fairly commonsense applications of the rational actor method, broadly interpreted. So, for example, the 'bounded rationality' approach can be understood as insisting on the relatively unexceptionable points that rational calculation is hard, often counter-intuitive, and that acquisition of relevant information is sufficiently costly that most people will often hold false beliefs (and do so entirely rationally). Beyond this, I think behavioural economics can be fine as a corrective to certain extreme forms of the *homo economics* assumption. In this sense, I think it is time that we economists took notice of what the psychologists are doing and saying, and the incorporation of more or less agreed psychological results into thinking about economic contexts seems entirely proper to me. I broadly approve of economists doing laboratory experiments, and as I say, I think we have learned a great deal from these. Part of what we have learned is to be less confident about the predictions of familiar (largely *a priori*) models.

The foregoing discussion is largely methodological — operating at some remove from the policy context. And since I reckon context to be important, let me engage the policy implications directly. As Gary Banks remarks in his introduction, there is a distinction between, on the one hand, using results from behavioural economics (and experimental psychology) in developing models of policy-taker *response* to various policy initiatives, and on the other, in deriving normatively compelling rationales for policy intervention. I think this distinction is widely recognised by practitioners, but different scholars place different emphases on the two possible ambitions.

To illustrate, take the case of saving for the future. In this setting, behavioural economics appears in a double role. In the first place, it provides the policy rationale for intervention. There are, by now, many experiments that indicate that individuals' intertemporal choices have apparently irrational features. For example, people tend to discount hyperbolically rather than exponentially, with the effect that they will routinely exhibit intransitive preferences between near and far prospects. Accordingly, there is an apparently widespread conviction that, left to their own devices, many people will fail to provide adequately for their futures, and that various forms of subsidised or forced savings schemes ought to be put in place.

I shall want to make a remark about this conclusion a little later. But at this point, note the role of behavioural economics in the devising of policy solutions to the problem. Many of the schemes in place — whether of the compulsory savings kind or the social security system kind — would involve substantial 'crowding-out' of other forms of saving if agents were fully rational. People can borrow against their

future incomes to some extent: it is, for example, easier to get a substantial mortgage if you are in a superannuation scheme, than if you are not. But people do not fully adjust in the manner that fully rational agents would be presumed to respond — they do not borrow enough to offset the compulsory saving. Put another way, lots of policies seem to work much better than the standard theory suggests they ought to work. What should have merely marginal effects or perhaps no marginal effects at all turns out to have significant infra-marginal effects.

Since most Western economies have some form of savings promotion policy, and since this policy is, in general supported by policy economists — who also design the schemes — it is tempting to conclude that we are all behavioural economists of a kind — that most of us do not allow models of ‘hyper-rationality’ to interfere with what looks like sensible policy advice. Of course, the issues here are very complex, and the question as to just how successful many of the social security systems around the world will turn out to be is an ongoing policy problem. And whether we are saving enough *in toto* seems to remain an issue of policy concern — in which sense it seems as if the effectiveness of compulsory savings policies is not entirely clear!

I want to make just one remark — of a somewhat sceptical kind — in relation to this area of policy. For a long time, economists — from Pigou and Ramsey to Arrow and Buchanan — have been concerned about savings behaviour, less in terms of people saving for their own futures and more in terms of the lot of future generations. Those economists have made the psychological observation that individuals are generally selfish, and noted the analytic fact that future generations (into the medium distance) are not around to protect their interests. They have drawn the natural conclusion that future generations are likely to be in trouble and have developed a substantial literature about ‘excessive’ discounting of the future and what to do about it. But extrapolating backwards, as it were, people over the last three hundred years have been much the same as they are today, and yet each generation has over that period done on average better than its predecessor. Almost every economist agrees that there has been significant economic progress, pretty much however it is measured. The question is then how to square the plausibility of the two foundational observations and the anxieties of the economic theorists with the fact of economic progress. Now, of course, there may have been less progress than would have been optimal. Perhaps past generations should have impoverished themselves more than they did in order to secure an even better life for their children’s children. Perhaps. But it is not self-evident. What does seem self-evident is that, notwithstanding general selfishness, Pigovian myopia and the political impotence of future generations, the future does seem to have done pretty well, thank you very much!

What I take this to imply in the present context is that we ought to be careful not to extrapolate from a few basic psychological facts (for example, general selfishness and a tendency to discount the future in ways conducive to intransitivity) to large-scale economic outcomes and policy problems in relation to them. Hayek famously remarked that economics is not psychology, and seems to have had in mind the relevance of unintended (and hence not psychologically mediated) consequences. Schelling insists that at least some social processes are like musical chairs — they produce a certain kind of outcome whatever individuals have in their minds. And Schelling’s most famous ‘tipping equilibrium’ paper has, as its central message, the point that the same ‘segregation outcome’ can emerge under a very wide range of participant preferences — of which pure segregation might well be the least preferred (Schelling 1971). I want to make the same general point about the savings issue. I do not think psychology is totally irrelevant. But I do not think it is at all clear just how relevant it is, and in what way.

It is to me sobering that a generation of very distinguished economists seem to have worried about a problem that, at least in their own time, and for two centuries before them, turned out not to be a problem at all. Of course, things may have changed more recently. Issues about justice toward future generations have become much more topical in the light of the threat of global warming, as the coverage afforded Nicholas Stern’s report on the topic illustrates. Perhaps Pigou and Ramsey and Arrow were just prescient: they foresaw an issue that had not yet arisen. But I have to say that it seems to me more likely that they were misguided. The issue in the intergenerational case seems really to be one of the relative importance of individual bequests, as against stock-of-knowledge effects and institutional capital, as sources of intergenerational transfer. More generally, the question is whether and to what extent economic progress is a ‘visible’ (that is, psychologically mediated), rather than an ‘invisible’ process. If the latter, psychological factors might well be second order.

It was clear throughout the day’s proceedings that some participants see behavioural economics as hospitable (perhaps excessively so) to an extended program of government intervention in the economy. This was an important theme in Chris Fields’ paper, for example. On the other hand, it was also clear that at least some participants couldn’t see this anxiety as one worth taking seriously, either because they saw the main agenda as being to model individual response to policy as accurately as possible; or because they couldn’t see any expansion in the domain of public policy, if properly based on the ‘true interests’ of people, as in any way problematic. So I wish to close with a few remarks about this issue.

It seems clear to me that behavioural economics is hospitable to paternalist policies and that anxieties on this score — which form the centrepiece of Chris Fields’ paper

— are therefore worth taking seriously. The idea that actors are, by and large, good judges of their own interests is one on which the psychological evidence does throw some doubt. And that idea has been an important plank in the traditional defence of markets (and of liberal institutions more generally). If some people, left to their own devices, would make disastrous decisions for themselves, then any broadly ‘welfarist’ rationale for public policy suggests that such people should be prevented from enduring those disasters. Public policy towards savings, recreational drugs, addictive gambling and the like, exemplify this approach, as does much occupational health and safety legislation, compulsory insurance, seat belt legislation, water fluoridisation programs and so on.

To be sure, welfarist considerations are not the only grounds for individual sovereignty in choice situations. Classical liberals have always thought that there are principles of individual liberty at stake here that have value in their own right. And the welfarist case has to take adequate account of the now familiar ‘public choice challenge’ as to whether political and bureaucratic processes are likely to do better. It is after all, not necessary that individuals be good judges of their own interests, or even better than any other individual (sometimes it is true that our mothers would do better choosing for us than we would ourselves — genuine maternalism might have something going for it in many situations) The test rather is whether governments are likely to do better, even if guided by a bunch of psychology experts.

I accept all these points. But consider, as we might put it, the effects of new knowledge at the margin. If strong evidence comes to light to the effect that individuals routinely make mistakes — or that many do, so that the probability that you will make a mistake in any decision is higher than you think — this ‘news’ will strengthen the presumptive case for policy action to protect people from such mistakes. Or to put the point equivalently, such news will weaken the case of those who oppose those existing regulations that are rationalised on such protective grounds. And remember, there is currently in place quite a bit of essentially paternalist legislation, as the catalogue earlier mentioned suggests.

It was to me interesting in this connection that the Federal Trade Commission analogue of this conference, reported illuminatingly by Joe Mulholland, took an essentially cautious line. As he perceived it, most participants in that other conference were reluctant to recommend new policy interventions on the basis of behavioural economics findings (or findings from psychology more generally). ‘No new policy suggestions’ emerged: just the familiar nostrum that ‘more research is needed’. A cynical economist might wonder whether this conclusion reflected the composition of the participants: more academics than policy advisors. But, in any event, I am broadly in sympathy with that conclusion.

The view that ‘the complexity of human behaviour makes the formulation of policy remedies all the more difficult’ seems entirely in the right spirit. Right, in the sense that the ‘complexity’ claim seems consistent with the catalogue of results that the behavioural economics literature exposes. And right too, in the endorsement of caution.

I want to make three remarks in this connection. The first is that we have pretty good macro evidence to suggest that more regulation (however exactly motivated) is associated with significantly lower per capita GDP. For example, the Economic Freedom Index literature shows a very strong negative correlation between the Index and economic flourishing, whether the latter is measured by GDP growth rates or GDP per capita. The main component in these indexes is the extent of *regulation*. In fact, the component in the indexes associated with aggregate tax take is actually *positively* correlated with ranking of countries according to GDP per person, a fact remarkably under-remarked by the index constructors themselves. The general message here is that it is the degree of *regulation* that is most associated with low levels of economic performance. Such evidence does not, of course, carry any necessary causal message — but we cannot reject the hypothesis that there is a causal connection and that caution in the regulatory arena is called for.

The second reason for caution relates to the way in which increased uncertainty maps into policy response. I have long argued that the convexity of preference (the fact, more or less, that demand curves slope downwards) gives us a general reason for being risk averse in relation to policy intervention. If the chances of moving in the right direction and the wrong direction were 50/50, it would be better to do nothing, because the downside risks would be systematically larger than upside gains. Increased uncertainty constitutes an argument for less intervention, not more.

The third remark picks up on a point made by Chris Field — underlining the old public choice challenge that a general case for intervention depends not just on putative market failure but also on presumptive relative political success. I have already mentioned this, but Chris’s paper gives it a special twist by gesturing at the role of behavioural influences in electoral politics specifically. In fact, for reasons related to ‘rational ignorance’ and ‘expressive voting’, I suspect that voters might be considerably more vulnerable to lapses of rational reasoning and to epistemologically unjustified beliefs than those same agents will be in markets. The simple idea that costly mistakes are less likely to be made if the cost falls on the mistake maker seems broadly right to me, and quite independent of the claim (to me, plausible) that mistakes are more common than economics has traditionally allowed. Note just for the record that this general principle applies no less to policy advisors than to voters — the main people to suffer from a policy bungle are not the

policy advisors.

While making reference to Chris Fields' paper (one with which I have broad sympathy), I want to raise two queries. The first relates to the so-called 'soft' paternalism promoted by Cass Sunstein and Dick Thaler (2003). I take it that Chris feels that this kind of soft paternalism is less unobjectionable in classical liberal terms than Sunstein and Thaler imply. Perhaps this is so, but I confess that I have a certain sympathy with the 'soft' approach. The essential feature of this approach, as I read it, is to choose paternalist measures that make as minimal an assault on liberty as is possible. As I understand the technique, policy is designed to make salient those options for choice among which, the psychological evidence suggests, people would choose if well informed — but policy also allows those who want to, to help themselves to a larger smorgasbord of options. On the face of things, this has to be desirable, at least for anyone who cares about liberty. More generally, if liberty and (true) preference satisfaction are both objectives of policy, then we ought to search for policy instruments that minimise the conflict between those objectives. That is what holding liberty as a value entails, in any normative system that does not take liberty to be the only value!

The second query revolves around what people take liberty to entail. One of the important messages of the moral psychology literature (which is the philosophical analogue to behavioural economics) is that there is a case for enquiry as to what ordinary people take concepts to involve — alongside, or as an alternative to, *a priori* stipulation. So specifically, there must be a question as to the extent to which ordinary folk regard consumer protection legislation or compulsory savings schemes as inimical to their liberties. Others have mentioned John Locke, much more of a hero in libertarian circles than John Stuart Mill, and his famous remark that something '... ill-deserves the name of confinement that hedges us in only from bogs and precipices' (Locke 1690, para. 57). Perhaps Locke reflects common opinion here. Of course, common opinion as to how liberty should be best understood may not settle the issue, but, in the spirit of behavioural economics, it equally need not be treated as irrelevant.

To my bottom line. I think we economists have things to learn from psychology. Some of those things are important and policy-relevant. I do not, though, think that the lessons we should take involve replacing mainstream economics with some rival behavioural economics program: the lessons are finer grained than that, and they represent more an accumulation of apparent anomalies and puzzles and queries than the basis of an alternative grand theory. I certainly do not think, either, that the challenge from psychology should make us give up on our grand theory ambitions. But I do think that in devising policy in specific areas, we should be attentive to whatever detailed case-specific information the psychologists can offer. Some

critics may think this is not 'good economics', but I think it might nevertheless make for better policy!

Panel discussion

In the final session, following Professor Brennan's address, speakers were invited to make some closing comments.

In his closing comments, Professor Shafir touched on a number of points:

- The findings of behavioural economics are already moving beyond the laboratory to both controlled-experiment and real-world implementation. He cited the Save More Tomorrow program (developed by Benartzi and Thaler (2004)) as a very successful application of behavioural economics to the marketplace.
- One way of approaching the paradox of disclosure information is to switch the focus to education and consumer literacy. But education can not solve all the problems people face as consumers. Professor Shafir gave the example of teaching children in poor communities about good nutrition when there is nowhere in their community that they can buy fresh vegetables. While the intention is good, the education is effectively 'a form of abuse'.
- 'Behavioural economics is not a campaign to promote regulation. Behavioural economics is an interdisciplinary academic enterprise trying to give us a better picture of human behaviour as it applies to economic problems'. Discounting the evidence is not a viable approach.
- Ultimately we have to realise that people have weaknesses and limitations. People realise that themselves — they want help and are willing to ask for it, including from government.

Joseph Mulholland agreed with Professor Shafir that behavioural economics is not, on the whole, interventionist. But he noted that many within the behavioural law and economics subgroup do use behavioural economics to justify a range of paternalistic government policies. He also pointed out that behavioural economics introduces further complexity into the policy-making process by showing the variety of ways that consumers can respond to government regulations, thus increasing the difficulty of devising efficient remedies for market failures. For example, behavioural economics findings illustrate the complexities of designing 'cooling-off' rules that work. These rules are based on the assumption that giving consumers more time will allow them to come to a more rational decision. But behavioural research suggests that at times the reverse outcome may occur where

the rules instead encourage consumers to make rash decisions with the expectation that before the cooling-off period expires they will be more rational — but they never get around to it.

Chris Field reverted to the matter of liberty, drawing again the distinction between restricting people's liberty in order to protect others and restricting their liberty to protect themselves. He was less confident than Professor Shafir that most behavioural economists were averse to market intervention. Citing the changes in fashion in standard-form contracts over some time, he argued that the regulatory decision still came down to the intersection of fairness and efficiency. The benevolent consumer protectionist might want to omit or modify terms they perceive to be unfair, but this might 'ultimately distort markets in a way that reduces prosperity and consumer welfare overall'. The benefits of efficient markets for consumers cannot be overlooked.

Chris Field also argued that the findings of behavioural economics do not change the fundamental rule that governments should only intervene in markets where there is a demonstrated case for intervention, and the intervention is likely to deliver a net benefit to the community.

Professor Frey argued that behavioural anomalies discovered in the laboratory are transformed in social life and hence practically irrelevant to policy. Firms will discover and exploit the anomaly, thereby making it more important than in the laboratory, while consumers will try to defend themselves. The resulting game is more relevant to social science than the psychological artefact. He then argued that if we are concerned about paternalism, it is important to identify the paternalist. Isolated bureaucrats will behave differently to agents who are constrained by political and democratic competition.

Henry Ergas pointed out that corporations have an interest in discovering the gains from trade arising from consumer limitations — but by helping consumers to overcome them, rather than exploiting them. He cited as an example the strong market growth being achieved by Australian financial firms now competing with Save More Tomorrow styled savings packages, mentioned by Professor Shafir.

Dinner address

Ross Gittins

Economics Editor, The Sydney Morning Herald

‘Economics has not only become boring but also threatens to become irrelevant. Therefore I do not feel embarrassed about being unorthodox. In fact, I rather enjoy it!’

Frey (2001)

One of my favourite economist jokes is the one that says an economist is someone who can’t see something working in practice without wondering whether it also works in theory. There are two professions that possess an intuitive understanding of the propositions economists have come to call ‘behavioural economics’. They are the marketers, and the politicians. So what is behavioural economics? It’s economists satisfying themselves intellectually that there is a logic — as opposed to a rationality — to the intuitive behaviour of economic agents. It’s economists laboriously disabusing themselves of the mistaken beliefs they have acquired about the way agents behave, as a result of their internalising the assumptions on which neoclassical economics is built.

Behavioural economics is the scientific study of intuition. It involves accepting the power of intuition — that people are much more intuitive than rational — and understanding the reason why this is so, which gets back to the way humans have evolved and, specifically, the way their brains have evolved. Neuroscience tells us that the primitive, more instinctive and emotional part of our brain often overrides — or beats to the punch — the more recent, more logical part of our brain. This leads to a strange dualism in our minds: we’re often motivated to do things by considerations the more intellectual part of our brain knows to be unwise. This dualism explains why we have ‘present selves’ and ‘future selves’ which, in turn, helps explain the self-control problem humans have — a major topic of study for behavioural economists — and the misprediction of utility, time-inconsistent preferences, myopia and procrastination that this involves (Stutzer and Frey 2006). I guess what I’m saying is that, for a full appreciation of the intellectual power and fascination of behavioural economics, it helps to take in some neuroeconomics (Camerer et al. 2005).

Let me also say that I use the term behavioural economics to encompass the closely related field of research into happiness — or subjective wellbeing, if you prefer a more scientific-sounding label. Lest you feel that happiness is taking your newly-acquired tolerance of behavioural economics a bridge too far, let me just point out that happiness is the subject that brought Professor Frey's name to international prominence (Frey and Stutzer 2002), and that when Daniel Kahneman, the psychologist who won the Nobel prize in economics for his role in founding behavioural economics, had finished with prospect theory and heuristics, he moved on to the study of utility and wellbeing (Kahneman et al. 1999).

Conventional, neoclassical economics is widely held to be positive, not normative. But one of the things you soon realise when you study behavioural economics is that this is the wrong way round. Behavioural economics is the study of the way the world actually is, whereas conventional economics is the study of the way the world should be. That is, we're not rational, but in many circumstances we'd be better off if we were. The study of self-control problems involves reaching an understanding that the seemingly irrational things people do in their search for commitment devices — such as failing to claim tax rebates in fortnightly 'pay as you earn' tax instalments so as to maximise the size of their annual tax refund cheque, which the person is more likely to save — have their own logic; that they represent fallible agents trying to make themselves more rational. The study of self-control problems also leads you to the view that there may be a new role for economics in helping to make the world more rational, by imposing prohibitions on certain disadvantageous behaviour. In fact, governments already do this extensively — and with widespread public acceptance. It's just that no one sees it as having anything to do with economics, and often economists would be quietly disapproving of such interventions.

As an economic journalist, I'm supposed to keep my remarks practical, but I do want to say something theoretical and controversial. I believe that the assumptions on which the neoclassical model is based pervade the beliefs and policy preferences of economists far more than most of them realise. Economists generally have a strong commitment to individualism, freedom of the individual, the benefits of choice and the value of personal responsibility and, hence, a bias against government intervention and a desire to keep governments small and taxes low. This characteristic of neoclassical economics gives it a great affinity with the libertarian political philosophy, which to me explains why the right wing of economic rationalism is a lot more heavily populated than the left wing. (Who's on the left wing of economic rationalism? Mike Keating, Fred Argy, Bob Gregory and a few others.)

But my point is this: I believe conventional economics' commitment to

individualism and suspicion of government intervention rests heavily — more heavily than most economists realise — on the assumption that economic agents act rationally. We doubt that governments could ever know better than the individual how that individual's income could best be spent. Why? Because we assume the individual is rational in all things — that she can accurately predict utility, never does things she comes to regret and never displays time-inconsistent preferences. When you accept that individuals are far from rational you open up the possibility that governments may well be better judges of what's best for the individual. We assume agents are rugged individualists and are happiest when treated as such, whereas psychology tells us humans are group animals, whose preferences are heavily influenced by those around them, who care deeply about what others think of them, who are anxious to fit in but also conscious of their status within the group and desirous of raising that status. In other words, I believe that conventional economics' exaltation of individual freedom is simply scientifically outdated — a hangover from the 18th and 19th centuries, when we knew far less about human behaviour than we do today.

There are two broad approaches economists can adopt towards the lessons of behavioural economics. One is to use insights from behavioural economics to reframe essentially unchanged policy prescriptions from conventional economics, so as to make them more politically palatable. We know, for instance, that people react differently to essentially the same propositions, depending on how they are framed. We know that more people would decline consent for a medical operation with a 10 per cent failure rate than they would an operation with a 90 per cent success rate. We know from Kahneman's asymmetric value function, for instance, that people weight losses more heavily than gains of the same amount. From this, Richard Thaler (1985) developed four rules for reframing gains and losses: segregate gains (don't wrap all the Christmas presents in a single box), combine losses (because this reduces aggregate pain), offset a small loss with a larger gain and segregate small gains from large losses.

The second approach we can adopt is to use the lessons of behavioural economics to change the policies we pursue. I have no objection to the first approach — indeed, I think it would repay the close attention of econocrats. But I'm more excited by the second, more radical approach. So let me suggest some very general policy implications I draw from behavioural economics.

First, I believe that the profession needs to return to its original goal of maximising aggregate utility rather than maximising consumption possibilities. We now know it is possible to measure utility — to some extent at least. We also know that revealed preference is far from foolproof. People are not good at predicting their utility and they often come to regret their decisions — even to wish someone had stopped them

doing what they did. We know people get locked into behaviours they wish they could control. Neuroscience makes it easy to see how people's consumption decisions can be influenced at a semi-conscious level by advertising that appeals to their emotions. Among other implications, a switch of emphasis from consumption back to utility would require economists to abandon their see-no-evil approach to advertising. Many of the points that follow flow from a recommitment to maximising utility.

Second, economists need to study consumption. It never ceases to amaze me that economists can exalt consumption in the way they do and then take so little interest in it. The happiness literature makes it clear that people find some forms of consumption more satisfying than others (Seligman 2002; Van Boven and Gilovich 2003).

Third, economists need to acknowledge the importance people attach to social status and social comparison. Conventional economics is good at helping the community maximise its income, but it can do nothing to maximise people's *relative* income. And yet, we know that people are more interested in increasing their income in relative terms than absolute terms. From a community-wide perspective, a status race is pointless and wasteful. It's likely that, as real income rises over time, a higher proportion of income is devoted to the purchase of positional goods. Is this why we pursue efficiency? It's also likely that efforts to minimise the role of government and limit the growth of taxation have the effect of allowing people to maximise their spending on positional goods at the expense of the provision of public goods that would yield them greater utility (Frank 1999).

Fourth, the simple model of labour supply is misleading and needs rethinking. In practice, economists tend to underplay the one thing the model gets right: that leisure yields utility. In the unfavourable comparisons of rates of economic growth and levels of GDP per capita made between America and Europe, there is little acknowledgement that much of the difference is explained by the Europeans' preference for leisure over work. On the other hand, the model is quite wrong in assuming that work yields disutility. The happiness literature makes that clear — even if it wasn't obvious. Like you and me, most people derive great utility from their work most of the time. It follows that much could be done to increase utility by policies encouraging job enrichment. That is, when your goal is to maximise utility rather than consumption, you see for the first time that the issue of job satisfaction — which may be enhanced by such practices as team work or giving workers greater autonomy — is part of the economist's brief.

We know, too, that unemployment is a major source of unhappiness in peoples' lives — or, if you prefer, of disutility (Clark and Oswald 1994; Layard 2003). This fact creates a conflict between measures to increase efficiency and maximise utility

that reformers rarely acknowledge. This may be partly because their modelling assumes full employment, but I believe it's also thanks to a hidden assumption that the unemployed are to be envied for all their leisure time.

Fifth, policy makers undervalue the utility people derive from security and predictability. We give too little weight to the utility workers derive from job security, for instance. We need to learn that efficiency isn't everything.

Sixth, self-control problems are ubiquitous, but susceptible to policy remedies. Some self-control problems may be regarded as minor (television watching, for instance), but many constitute significant social and economic problems: obesity, smoking, drinking, drug-taking, gambling, speeding, the overuse of credit and the inability to save. Economists aren't as conscious as they should be that government intervention — and often, outright controls — to assist people conquer their self-control problems and to protect the community from negative externalities are widespread, of long standing and uncontroversial. Consider all the regulation governing the consumption, sale and advertising of alcohol and tobacco. Consider all the controls — speed limits, seatbelts, random breath-testing — that have succeeded in reducing the road toll. Consider the way employees are compelled to save 9 per cent of their wages, and how little opposition that relatively recent measure encountered. It's clear to me that the public often *wants* governments to impose these external commitment devices on it — and that this attitude makes considerable sense. The insights of behavioural economics should help economists to be much more receptive to proposals to use intervention to alleviate self-control problems, including the newly recognised problem of obesity.

Economics doesn't have to be boring, stuck in a rut and open to the charge of being based on out-of-date science. But to make economics more interesting and relevant to the solution of a wider range of the community's problems, economists have to be willing to learn new tricks.

A Roundtable program

Day 1 — Wednesday 8 August 2007

Conference dinner

6.30 — 7.00 Pre-dinner drinks

7.00 Dinner Welcome by Gary Banks (Productivity Commission)

Guest speaker: Ross Gittins (Sydney Morning Herald)

Day 2 — Thursday 9 August 2007

8.45 — 9.00 Registration

Session 1: Introduction to the issues
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9.00 — 9.10 *Welcome and chair:* Gary Banks

9.10 — 9.55 *Speaker:* Eldar Shafir (Princeton University)

9.55 — 10.10 *Discussant:* Paul Frijters (Queensland University of Technology)

10.10 — 10.40 *General discussion*

10.40 — 11.00 Morning tea

Session 2: Motivation and behaviour
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Chair: Judith Sloan (Productivity Commission)

11.00 — 11.45 *Speaker:* Bruno S. Frey (Zurich University)

11.45 — 12.00 *Discussant:* Mark Harrison (Visiting Researcher, Productivity Commission)

12.00 — 12.30 *General discussion*

12.30 — 1.30 Lunch

Session 3: Behavioural economics and consumer policy

Chair: Robert Fitzgerald (Productivity Commission)

1.30 — 2.05 *Speaker:* Joseph Mulholland (Federal Trade Commission, USA)

2.05 — 2.40 *Speaker:* Chris Field (Ombudsman, Western Australia)

2.40 — 2.50 *Discussant:* Louise Sylvan (Australian Competition and Consumer Commission)

2.50 — 3.00 *Discussant:* Henry Ergas (CRA International)

3.00 — 3.30 *General discussion*

3.30 — 4.00 Afternoon tea

Session 4: Reflections for public policy

Chair: Gary Banks

4.00 — 4.15 *Speaker:* Geoffrey Brennan (Australian National University)

4.15 — 4.35 *Panel discussion:* All speakers

4.35 — 4.55 *General discussion*

4.55 — 5.00 *Closing remarks:* Gary Banks

B Roundtable participants

Mr Gary Banks	Chairman, Productivity Commission
Professor Geoffrey Brennan	Social & Political Philosophy, Australian National University
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