

(SHREDECON EDITION)

BEHAVIOURAL ECONOMICS AND ECONOMIC POLICY

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1. INTRODUCTION

From the standpoint of mainstream economics, the role of policy is to address market failure and distributional concerns. People are viewed as constrained merely by the time and wealth at their disposal and as if they act optimally given the information to which they have access. Given this, policies have to focus on making information easier to obtain and on changing incentives, property rights and/or the distribution of wealth. In reality, people face an additional constraint, namely, their limited cognitive capacity. Behavioural economics takes account of what is known about how this affects decision-making processes. It leads to a different view of what can be achieved by economic policy and what needs to be kept in mind by those trying to devise effective policies. From the behavioural perspective, there is scope for policy to be designed to work by affecting whether people think they need to take a decision, how they evaluate the options they discover, and how they choose between alternatives. These issues are explored in sequence in this chapter.

2. POLICIES THAT WORK BY CAUSING PROBLEMS THAT PROMOTE SEARCH AND DISCOVERY

Problems in gathering and processing information commonly preclude the computation of optimal strategies and leave decision-makers unsure about what they can achieve. Herbert Simon's Nobel Prize-winning work therefore portrays economizing behaviour as a 'satisficing' activity rather than as constrained optimization: people focus on trying to reach targets that they

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have based on past experience and their inferences about what it is currently reasonable to expect. If they do better (worse) than expected, they wait to see if this is a one-off outcome rather than jumping to the conclusion that they should raise (lower) their aspirations. Aspirations thus follow attainments with a lag.

Decision-makers are typically busy trying to implement plans, aware that problems may arise and impede their progress, so they tend to avoid using up their cognitive capacity by looking for ways of doing better in areas where they believe they are on track to meeting their targets. Policymakers may therefore be able to induce higher attainments by producing situations in which those working in firms are more likely to search for ways of improving productivity and consumers are more likely to discover products that give them a better ‘bang for their bucks’.

Policies aimed at opening up markets to greater competition—for example, by reducing tariffs and other barriers to imports—may make it harder for firms to meet their targets with their established routines. New competitors provide stimuli to find cheaper ways of producing a given product and/or more demanding external reference points for the non-price standards at which they should be aiming. Under such pressures, firms may discover ways of achieving levels of performance that they had not previously thought possible.

Policies aimed at changing the extent of competition within organizations may produce similar results. Many privatization policies and structural reforms in public service and tertiary education in recent years have been designed to raise employees’ expectations about what they will have to deliver in order to keep their jobs or achieve promotion. However, while such policies may increase worker productivity in the short term, they are not guaranteed to produce welfare gains. The top-heavy management structures needed to run such systems may chew up much of the revenue gains while line workers may find it harder to meet other aspirations, such as those regarding their work-life balance and their stress levels [cf. the analysis of economic reforms in New Zealand offered by Hazledine (1998) and the work of Carr (1994) on the impact of managerialism in Australia’s education sector]. Furthermore, encouraging growth in the number of competitors in a market can be a mixed blessing for customers: while privatization and exposure to competition may force phone companies that previously were sleepy State monopoly to set higher standards, consumers may find themselves bewildered by the range of unfamiliar suppliers competing for their business.

From a behavioural perspective, decision makers economise on the costs of deciding among a set of options by taking the default option. This tendency to settle on a default option often produces missed opportunities in the economic system. Those who take the default option may end up with

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poor value for money, so policy may have a role in shaping the kind of options they face. Consider financial services, for example: Waterson (2003) suggests that the fact that insurance is much more hotly contested area than banking may be due partly to insurance products having an annual renewal notice (which may provoke search if it seems to involve a big increase) whereas deposit and credit card accounts are open ended. (Even with insurance, the default option—accept the renewal quotation—favours the existing provider, especially if the customer has already arranged automatic payments by direct debit.) Customers have to be proactive if they want to ensure they are not sent, and billed for, a new credit card when their existing one expires. An implication of this for financial regulators is that consumers might be more choosy if they had to act periodically to determine which firm they wanted to provide their deposit or credit accounts. One might even go so far as requiring them to provide evidence (for example via an authorization code picked up via a visit to a website run by the regulator) of having checked alternatives before they could authorize that current arrangements be renewed.

Policies aimed at steering people away from traditional default options also have great potential to reduce damage to the environment: for many consumers, getting into their cars is the default option even though, if they bothered to check things out, they could discover viable alternatives that reduced their greenhouse footprints. Changing the incidence of congestion by introducing bus-lanes and raising the costs of finding parking spaces by reducing their number (rather than simply raising meter charges) are obvious ways of getting motorists to rethink their behaviour. Similarly, if manufacturers are required to meet pollution reduction schedules rather than being allowed the possibility of simply paying carbon taxes and then passing the costs on to their customers, they may be more likely to search for ways of reducing pollution. In the process they may discover solutions that result in their businesses becoming both greener and more profitable.

Sometimes, however, it may make sense to design policies that involve *creating* a default for consumers that will be in their own interests, given their tendency to adopt the default position. Superannuation is an obvious case, give that (a) workers tend not to switch their superannuation accumulations out of the fund into which they are deposited by default, and (b) well-managed not-for-profit industry superannuation funds will tend to give higher returns than for-profit funds that are open to all, due to smaller fees and not needing to pay dividend to shareholders. Policymakers might thus serve consumers well by requiring that employers must use the former kind of superannuation fund as the default option.

3. EVALUATION OF OPTIONS:
TWISTED AND TWISTABLE

Economics normally avoids the question of how decision-makers work out the possible costs and benefits of the alternative courses of action that they consider. In reality, once an option has been discovered, its costs and benefits are not self-evident, even in probabilistic terms. Rather, assessments of the implications of selecting one option rather than another are mental constructs. They are therefore open to being twisted by cognitive processes that may involve self-deception through wishful thinking or denial where it is cognitively difficult to face up to the presence of tradeoffs and dilemmas. This is particularly likely where at stake is the chooser's ability to maintain ideas that they use as key foundations for constructing their view of themselves and the world in general. Awareness of such processes leads to recognition of both the need for policy interventions and barriers to making economic policies work.

Consider for example a person who is in an electrical appliance store and is tempted by the idea of using their credit card to buy an enormous plasma television currently offered at a 'special' price. This could be a bad thing if the person would have trouble paying the credit card bill. Moreover, the energy consumption of such a television is far higher than that of a smaller, less ostentatious LED television. However, instead of seeing these downside the consumer may end up reasoning that (a) it is a good idea to buy it right now because of the special price (despite the fact that the prices of these product, like those of computers, tend to fall through time), (b) the credit card debt will be paid off rapidly (wishful thinking) and (c) although the mandatory energy efficiency label gives it a poor rating, this will be a product that reduces the consumer's energy use since it will reduce the number of occasions when they drives into town to watch movies at cinemas (a conclusion reached without any serious attempt at calculation).

Wishful thinking about credit card servicing capacity is relatively easy to prevent via a central database of credit cards and a prohibition on financial institutions issuing credit cards whose credit limits will allow the cardholder to exceed a particular ratio of total credit to income. Product labelling is less likely to have as much clout. For example what should consumers in the UK make of Carbon Trust labelling that enables them to see that making a packet of Walker's salt and vinegar potato crisps involves 120g of CO₂ emissions? As Pollard (2010) points out, this is slightly worse than driving one kilometre in a BMW316d. Depending on whether they are feeling peckish or want to travel in a modern symbol of affluence, they can 'spin' the information either way.

Personality differences determine the kind of spin that individual decision-makers give to a piece of information. This complicates life for

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policymakers. However, there is scope for designing policies around what is known about *general* tendencies for ‘heuristics and biases’ to affect what people make of the situations in which they find themselves. For example, it is widely observed that people tend to treat high probabilities as certainties, and ignore *very* low probabilities, whilst taking *fairly* low probabilities much more seriously than economists would normally expect. It is also common for people to make erroneous assessments of risk due to the way information is presented. In consequence, they often place bets that make little sense in terms of statistics and expected utility theory. For example, people are much more likely to purchase extended product warranties (which make little sense over a lifetime in which one buys many appliances, only a few of which will fail prematurely) than insurance against becoming physically unable to work, while some fail to inoculate their children against diseases such as whooping cough because of fears about relatively rare side effects.

By designing policies in the light of knowledge of these information-processing biases, it may be possible to manipulate choices, whether to protect people against their own shortcomings or to get them to behave in a way that suits the interests of the policymakers. Hanson and Kysar (1999a, 1999b) offer a comprehensive guide to the how firms do this to consumers but similar principles can be applied by public agencies seeking to meet social goals (Thaler and Sunstein 2008). For example, a behavioural health economist would point out that how information is framed can make all the difference: ‘90 per cent fat-free’ sounds much more appealing than ‘10 per cent fat’.

In addition to policies aimed at protecting consumer from their cognitive shortcomings by managing the information environment that they face, it may also be necessary to set rules about what firms are allowed to offer. For example, in attempting to achieve or maintain particular levels of social status, consumers will be prone to delude themselves about the financial commitments they can safely make. If firms in the financial services sector are willing to allow them to risk mortgage stress and bankruptcy by letting them step up their debt/income ratios, they can try to buy more expensive properties and other status symbols for themselves and their offspring. As Frank (2007) argues, this kind of behaviour is akin to an arms race and consumers typically will fail to end up feeling any better off despite the debts they have incurred. Worse still, they may typically not end up in bigger homes unless they are prepared to incur bigger commuting costs from the city fringes. The trouble is that the products they are trying to afford are ‘positional goods’: there is a limited supply of homes with waterfront views or convenient location, so attempts to chase the limited supply mainly serve to push up prices. The ‘soccer moms’ who drive larger and larger 4WDs in attempting to out-do each other and protect their

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children from other people's vehicles likewise mostly cancel out each other's efforts. If they all travelled in smaller, lighter vehicles, they would all be safer and pollution would be reduced.

If policymakers wish to restrain real estate prices and reduce the incidence of personal bankruptcy and financial stress, the simple way to do this is to impose rules for the repayment periods of loans and the maximum ratios of monthly repayments to income. To limit the availability of huge 4WDs for family motoring, policymakers might use strategically designed rules regarding weight and height of private passenger vehicles, or their ability to avoid rolling over when swerving at a required speed to avoid an obstruction representing a moose or kangaroo.

4. POLICIES TO REDUCE CONFUSION AND ADDRESS THE CONSEQUENCES OF INTOLERANT DECISION RULES

Cognitive constraints often drive decision-makers to choose without first searching to discover a comprehensive list of alternatives and carefully sizing them up. Familiar brands or recommendations from trusted authorities provide quick solutions to problems. Where decision-makers do engage in extended problem solving they will be prone to run out of cognitive capacity. People can consciously process only about ten bits of information per second (Marschak, 1968) and can only keep in mind about seven things at a time (Miller, 1956). They may thus fail to notice changing incentives or be unable to remember information they have come across. They may also get confused and make mistake in the process of trying to make sense of whatever information they have at hand. Given these constraints, they may be prey to groups of firms that operate as a 'confusopoly' by trying to overload them with information in ways that may conceal the relative value for money offered by rival products. If regulators try to intervene by demanding more comprehensive product disclosure statements, they may make matters even worse.

Consider how mobile phone service providers offer enormous choice of products each of which is specified via a contract offer that contains extensive 'fine print'. To work out which one is best, after making some assumptions about future conditions, consumers need to be able to decipher the wording with the skill of a contract lawyer and then perform complex calculations across hundreds of rival plans. In such situations consumers clearly will have to adopt a simplifying strategy and run the risk of being led in particular directions by firms whose marketers are applying knowledge of cognitive biases (see Ayal, 2009). It will be hard to know whether a firm that offers a 'simple, no-nonsense' deal is actually offering something that will be cheaper or is trying to prey upon those who find it

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altogether too confusing to try to work out which supplier is actually offering the kind of service they want at the lowest price.

Similar issues arise with financial services. O'Shea (2010) tested how well consumers from a wide variety of backgrounds understood credit contracts. Most of them failed dismally and said that what they wanted was not more information but summaries that simply told them what the total cost of a given loan would be if repaid via a particular sum per month.

Markets that operate as confusopolies do not inherently require regulatory intervention. In some cases, consumers may be able to outsource cognitive effort and expertise to websites that provide comparison services. However, these may be expensive to programme accurately and difficult to offer in a way that is profitable, so in some cases they may be unreliable or absent. For providers of such services and for public policy designers alike, there is also the problem that the confusopolists may keep changing their products to retaliate against attempts to make them easier to compare. For example, if regulators try to make life simpler for supermarket customers by requiring unit pricing signals to be given, food processing companies may attempt to increase the differentiation of their products in non-price terms via taste, quality of ingredients, convenience of packaging, and so on. It should also be noted that public policy itself may be a cause of confusion, an obvious example being taxation systems that in some countries are so complex that it is unwise to complete a tax return without employing the services of a professional tax advisor.

Policymakers need to know how consumers will try to cope with information overload as well as with perceived gaps in information. The use of decision rules is central to these processes. The discussion above provides an example of such a rule, namely, 'if choice is too complicated, try to outsource it to a specialist website'. Where consumers try to solve decision problems themselves, they seem to change which kind of decision rule they use depending on the amount of information they have to process (Payne, Bettman and Johnson, 1993). It is difficult to compute tradeoffs across a wide variety of alternatives that differ significantly across many characteristics. In such situations, people are more likely to choose using non-compensatory decision rules that involve eliminating any option that does not 'tick all the boxes' on a checklist. Another workable strategy is to eliminate options progressively by applying a set of tests in order of priority until only one remains. A compensatory, trade-off-based approach to choice may prove workable if applied to a shortlist of options that meet an entire set of checklist criteria, but in some cases a simpler way of selecting from the shortlist may be used, such as 'choose the cheapest'.

Even if a trade-off is made at the end of a decision process, the use of intolerant decision rules to derive a shortlist remains significant. Options that are dismissed at an early stage due to failing to pass a particular test are

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not given further consideration, regardless of their strengths in other areas. In other words, it is though a kind of discrimination is going on. Policymakers in recent decades have often focused on designing frameworks to prevent people from suffering discrimination in labour markets and in access to public services on the basis of age, gender, disability or sexual orientation, but the significance of non-compensatory decision rules runs far wider. This is particularly the case if there are also barriers to making substitutions on the production side due to certain activities requiring specific skills.

For example, consider a situation in which domestic car producers are failing to produce vehicles that meet the checklists that potential customers have evolved (for example, because domestically produced vehicles are falling behind global standards in safety, fuel efficiency, luxury or build quality). If so, imports may rise and exports may be lost. Conventional wisdom suggests that the firms should concentrate on offering products whose features reflect their comparative advantage, and that the emerging trade imbalance may be thwarted if the domestic currency is allowed to depreciate. The behavioural perspective, by contrast, implies that a change in relative prices of exports and imports will have limited impact so long as the imported vehicles still come within the budget ranges of potential buyers. For the domestic cars to sell better, they need to be improved in areas where they are being deemed inadequate rather than being improved in areas where they are already seen as satisfactory. To achieve the necessary improvements, the manufacturers may need to develop new capabilities, which in turn may require immigration policies that are more flexible, enabling them to bring in workers with key skills. In the long run, it may be necessary to change attitudes and academic programmes so that it is easier to attract top students into fields such as engineering that they would otherwise 'rule out' in favour of, say, commerce subjects. In other words, where non-compensatory decision rules are producing 'no go areas' in an economic system, the policy problem is how to inculcate substitutability in related parts of the system such that the resources that are prerequisites for solving the key problem become available.

5. CONCLUSION

The behavioural economist's view of the cognitively constrained real-world decision maker has both bad and good news for the policymaker. The bad news is that policies may fail dismally due to incentives not being noticed or acted upon in the way that standard economics might predict. The good news is that there is potentially a much bigger role for policy interventions to help people cope better with the problem of choice or to 'nudge' them

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[cf. Thaler and Sunstein (2008)] into taking decisions that will increase the productivity and wellbeing of the nation.

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