# Behaving ourselves in the marketplace

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Ian McAuley, University of Canberra

What happens at a day-care centre when a fine is introduced to discourage parents from coming late to pick up their children?

Any lawyer or economist will tell us that the question is as dumb as asking what happens when free beer is provided at a football match.

Sceptical of the conventional wisdom of lawyers and economists, Uri Gneezy and Aldo Rustichini conducted a controlled experiment in ten day care centres in Haifa, Israel. Up to the time of the experiment there had been no fine for a late pickup. The experimenters introduced a fine of ten Shekels (in purchasing power equivalent to about \$A8.00) on parents who were late by ten minutes or more.<sup>1</sup>

If the results had confirmed the conventional wisdom – that the fines improved behaviour – their work would have gone into the annals of trivial research, confirming the conventional wisdom of law and economics. But they found that the incidence of late pickup actually worsened.

In the minds of parents, the fine became a price for a late pickup. There was now a 'market' for late pickups. A ten Shekel price was easier to bear than the guilt and social disapproval of causing inconvenience to the day care staff.

This is just one of the experiments in a discipline known as *behavioural economics*, an eclectic discipline which draws on conventional economics, but which also brings in other disciplines such as individual and social psychology, game theory and even neurology.

What the Haifa day care centre experiment confirms is that once we find ourselves in a 'market', our behaviour changes from what it may have been in other social contexts. More generally, the discipline of behavioural economics gives an insight into what we actually do in markets, rather than the abstract notion of what economists believe we do.

## Conventional economics - the repository of timeless truths

In the Spring 2006 issue of *D*!ssent, Denis Kenny brings to our attention the ideas of Leo Strauss, 'the source of the dogmatic imposition of the global market as a timeless truth of natural law'.

The dogma lies in the set of assumptions underpinning mainstream or conventional economics, particularly microeconomics. Provided we are well-informed, we are assumed to behave rationally in market transactions. We distribute our limited financial resources in the

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Uri Gneezy and Aldo Rustichini 'A fine is a price' *Journal of Legal Studies*, vol. XXIX (January 2000)

way which maximises our individual welfare. We approach markets knowing what we want, what we are willing to pay, and with the capacity to make the appropriate calculations to get the best deals. It's a parsimonious and dismal view of human behaviour; we are no more calculating machines – *homi economici* – devoted to solving mathematical allocation problems.

That model of behaviour is known to economists as *economic rationalism* – an unfortunate term, for many on the 'left' in Australia have used it as a shorthand to describe and criticise the entire discipline of economics. In the realm of public ideas, however, it isn't a strong platform if there is an inference that in attacking economic rationalism one is supporting irrationalism. Use of the term 'economic rationalism' makes it easy for critics to dismiss the excellent work of scholars such as Michael Pusey and Lindy Edwards.<sup>2</sup> The



term gave the high ground to Paul Keating when, in defence of his government's neoliberal policies, he said: 'I'll tell you what I'm not, and I'm not an economic irrationalist'.<sup>3</sup>

Furthermore, the notion that all economics is based on this dismal model of behaviour gives the 'left' an excuse to distance itself from economics altogether, rather than identifying the deficiency of this particular form of economics. Following the loss of the appeal of Marxist economics, the 'left' has tended to retreat into the softer areas of intellectual activity, thus, by default, leaving the realm of economic ideas uncontested.

<sup>&</sup>lt;sup>2</sup> Michael Pusey *Economic Rationalism in Canberra: A nation building state changes its mind* (Cambridge 1991). Lindy Edwards *How to argue with an economist* (Cambridge 2002).

<sup>&</sup>lt;sup>3</sup> Quoted on ABC Radio National *Money*, *Markets and the Economy* 'The Rise of Economic Rationalism' (16 November 200)1.

#### The limits of conventional economics

**F**rom the parsimonious assumptions of microeconomics it is possible to build a reasonably sophisticated set of models, which are used to predict behaviour, and to guide public policy. Thus we find the familiar 'laws' of supply and demand, and we find a defined role for public policy to support competition, to ensure consumers are informed, and to reserve other interventions for situations of clear market failure, such as natural monopoly or the provision of public goods.

(That, at least, is the policy theory, for in Australia there are many areas, such as retail pharmacy and international airlines, where the government protects vested interests from competition, and there is a reluctance to use public funds to provide much-needed public goods, such as transport infrastructure, education and environmental restoration.)

Much of the time these economic models work, but without a great deal of precision. If a cyclone wipes out most of the banana crop, banana prices rise. If tariffs on clothing are reduced prices fall and people buy more clothes.

But what if a tunnel is built under the CBD of Sydney, with a \$3.50 toll? Surely people, rationally, would spend \$3.50 to save going through congested streets and thirteen sets of traffic lights, putting wear on their engines, transmissions and brakes. But they don't.

That is one of the situations where the models start to break down, for they don't take into account a range of behaviours not predicted in that set of parsimonious assumptions.

The shortcoming of conventional economics is that it doesn't re-visit those assumptions. What if people are concerned with more than self-interest? What if people exhibit consistent biases which lead them away from making sound decisions? In most disciplines, when theory fails to align with observation, it's time for the theory to be refined and re-visited, but not in the mainstream of economics.

This is where behavioural economics has its place. It is largely an empirical discipline; that is, it does not rely on assumptions about behaviour, rather it tries to find what people actually do. Some research takes place in laboratory conditions – usually with easily-found undergraduates who can be persuaded to spend a few hours engaged in market simulations; that's the sub-discipline known as *experimental economics*. As the discipline has grown, however, there has been more real-life research, such as the Haifa experiments.

As a recognised and named academic discipline behavioural economics has a short history, but, contrary to academic belief, knowledge can exist for a long time before it appears in academic journals. Writing more than 200 years ago, Adam Smith and Jeremy Bentham both recognised that psychological factors could override the assumptions of rational economics. (Smith would be dismayed to know that the most enduring part of his work is his example of the self-interest of his butcher and baker as a metaphor for the workings of a competitive market.)

In the twentieth century, however, economics took an excursion into the territory of mathematics, and build a set of sophisticated models relying on watertight steps of deductive logic. It came close to a 'theory of everything', and in the later years of the century, it found

ready customers among policymakers seeking simple solutions and seeking justification for winding back the influence of governments in markets.

This development was not unchallenged. In the postwar years prominent academics, such as Herbert Simon (later to be awarded the Nobel Prize in economics), questioned the limits of rational behaviour in markets. In 1974 Amos Tversky and Daniel Kahneman, two academics at the Hebrew University in Israel, published an article describing and analysing 'heuristics' – the rules of thumb we use in markets and other decision-making situations, and found that while these heuristics are generally functional, in many situations our decision-making is subject to systemic biases which lead us away from 'rationality' and against our own best interests.<sup>4</sup> They, and other researchers, also found that factors such as education and experience provided little protection against these biases.

That was when the discipline of behavioural economics started to become formally established, and it was boosted when in 2002 Kahneman was awarded the Nobel Prize in economics (Tversky had died in 1996). A further boost came with the award of the 2005 Nobel Prize in economics to Thomas Schelling, who had a long academic career in linking economics, game theory and psychology.

The discipline is most firmly established in the USA and Israel. In Australia, where there are more rigid academic boundaries, it is experiencing more difficulty in becoming recognised as an academic discipline.

## Some findings of behavioural economics

What follows is no more than a few of the many revelations of behavioural economics. I have selected those which have a strong bearing on public policy. Those who have not had the misfortune to be exposed to economic theory may find these revelations, particularly those on altruism and fairness, to be self-evident, but to those economists who advise on public policy they are far from self-evident.

## We are altruistic

Behavioural economics challenges the notion of individual self-interest as the prime motivating force in our market transactions. Behavioural economics, particularly in its interface with game theory, shows convincing evidence of altruism in our decision-making, even when there is no opportunity or expectation of reciprocation.<sup>5</sup>

One of the classic experiments is known as the 'dictator game'. In a one-shot experiment, one subject is given a sum of money, with the direction to divide it with another (anonymous) subject in any way he or she wants – including the possibility of a zero allocation to the other subject.

<sup>4</sup> Amos Tversky and Daniel Kahneman: 'Judgment under Uncertainty: Heuristics and Biases' *Science* 27 September 1974:Vol. 185. no. 4157,

<sup>&</sup>lt;sup>5</sup> For an excellent collection of research on altruism in behavioural economics see Colin Camerer *Behavioural Game Theory* (Sage 2003).

Conventional economics would predict a consistent 100-0 division, but such outcomes are rare. Outcomes generally range from around 50-50 through to 70-30.

We may believe that the 'dictator game' is a long way from real life, but it is a metaphor for Australian Workplace 'Agreements'. (It's an obscenity to use the term 'agreement' to describe a take-it-or-leave-it contract). Some 'dictator game' experiments require the recipient of the division to perform a task; unsurprisingly the more unequal is the division, the poorer is the performance of the task.

This is probably well-known to every competent front line manager – the foremen and superintendents who have the closest contact with workers on the shop floor and who have probably risen through the ranks themselves. Those who feel they have been bullied or treated unfairly will not give of their best. But this piece of wisdom seems to have escaped the attention of those who drafted Australia's industrial relations 'reforms'.

#### We value a fair go

A variation on the 'dictator game' – known as the 'ultimatum game' – gives the recipient the opportunity to reject or accept the division. If the recipient rejects the division, both parties walk away empty-handed; if the recipient accepts each party gets the proposed share.

Conventional economics suggests that any division that gives at least something to the recipient – down to 99-1 – will be accepted, but commonly divisions poorer than 70-30 are rejected. Those who reject the offer do so at a cost to themselves, but they incur this cost in order to send a strong message to the proposing party.

To make sure these outcomes are not confined to laboratory situations where the stakes are small, experimenters have gone to poor communities in developing countries, with offers of sums which are meaningful in such contexts – typically \$US100. The results are slightly weaker, but they still hold.

In a defence of inequality we often hear aphorisms such as 'a rising tide lifts all boats'. It's OK if the incomes of corporate executives rise at ten percent or more, provided the poor also get some paltry benefit. For most of us, however, it's not OK.

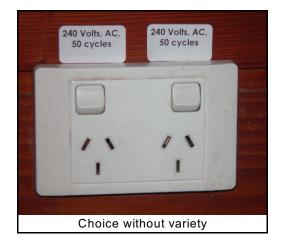
Herein lies some explanation for the spectacular commercial failure of Sydney's cross-city tunnel. The toll had no legitimacy; after all why should people be expected to pay for their own good behaviour of avoiding adding to the city's congestion? And why was there a toll at all, with profits going to a foreign investor, rather than payment through low-cost government debt? Revenge is sweet, even if it is at the cost of driving through congested traffic.

Behavioural economics speculates, but is inconclusive on the reasons for altruism and our valuation of fairness. Is it through socialisation or evolution? Evidence exists both ways, and there is no reason why both cannot hold. Whatever the causal factor, behavioural economics, unlike conventional economics, gives strong theoretical support to those who see value in the 'fair go'. An assurance that our rewards and costs are distributed fairly is of value in its own right; it is an essential component of our social capital.

Choice is OK – up to a point

Sheena Iyenger and Mark Lepper, psychologists at Columbia and Stanford Universities respectively, conducted experiments in supermarkets in which they had tables displaying a number of varieties of jam. Shoppers who stopped by the tables were given a sample and a discount voucher which they could use towards buying jam. When they displayed 30 types of jam, only 3 percent of shoppers actually used their vouchers and bought jam, but when they had only 6 types on display, 30 percent of shoppers bought jam.<sup>6</sup>

'Choice' has become the mantra of market advocates, as if a world without 30 varieties of jam or 240 makes of car is some Soviet-style dystopia.



'Choice' is taken to absurd lengths. In the name of 'choice' electricity supply and water utilities are broken up into several competing retail firms – all constrained by the nature of the technology to offer the same electricity through the same wires at the same voltage, and the same water from the same catchments through the same pipes. They don't make simple offers, such as comparative prices per kilowatt hour or per megalitre of water; that would be too much like competition. Instead they offer complex bundles, often combining more than one utility. To do a proper cost comparison one needs records of past use, projections of future use, proficiency in spreadsheet modelling, and many hours of spare time.

Behavioural economists have borrowed the term 'confusopoly' from Scott Adams, creator of the Dilbert characters, to describe this situation. Confronted with an excess of choice, and complexity in calculating the best utility package, many consumers choose not to choose, and among those who do make a conscious choice and change their supplier, or who change their plan within an existing supplier, many move to a more expensive plan.

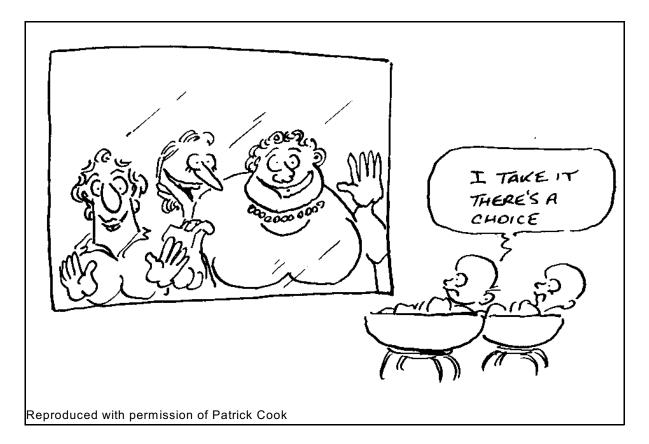
Markets work well when there is genuine variety, but it's hard to make a case for choice of utility suppliers. It is quite reasonable, indeed it's quite rational, to leave the retail functions of water and electricity to a well-regulated government monopoly, but that view has become politically incorrect. Governments have deprived citizens of a basic choice – the choice of leaving utilities (and roads, telcos, airports) in public ownership.

## Our fear can be exploited

The early work of Tversky and Kahneman was concerned with the ways we make decisions in the face of risk and uncertainty, and they found our behaviour is far from rational, even when information is easy to obtain. We overestimate the risk of some unlikely but easilyimagined events, while ignoring other areas of risk entirely. In some areas of our lives we are hyper-cautious, while in others we are blithely reckless.

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Sheena Iyenger and Mark Lepper. 'When choice is demotivating: Can one desire too much of a good thing?' *Journal of Personality and Social Psychology*, 2000, Vol 79, No 6, 995-1006.



Insurers and other financial firms capitalise on these biases, by selling insurance we do not need while leaving us exposed in other areas. We are offered insurance on the contents of our freezer, and insurance for broken glass, but it is hard to get cover for catastrophic events, such an area-wide bushfire or cyclone which results in an escalation of building replacement costs. Consumers are apt to pay very high premiums to buy out of trivial risks which they could easily cover themselves, and insurers, hungry for market share, and wanting to establish their reputation by their response to small claims, push such policies heavily. By contrast, it is very hard for a 'rational' consumer to buy risk-sharing products with high deductibles, and which protect against catastrophic risk.<sup>7</sup> Similarly many investors, faced with choice of superannuation, buy long-term investment products with low volatility but low returns, such as 'capital stable' products, at great cost to their future returns.

## As can our weaknesses

Conventional economics assumes that if we go on buying a product in an open market we are doing so out of free choice. But ask anyone hooked on smoking, junk food, or gambling, and the explanation is different.

Addiction involves a loss of autonomy – a loss of control in markets. Those who make and promote cigarettes, breakfast cereals and gaming venues know the value of getting a customer hooked, preferably at an impressionable age.

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Justin Sydnor Sweating the small stuff: The demand for low deductibles in homeowners insurance, mimeo, University of California, Berkeley 2006..

Addiction is an extreme example of our general inability to predict our future behaviour. Even those who don't have a smoking, weight or gambling problem find it hard to make rational choices when it comes to commitment of future costs and benefits.

Behavioural research shows we tend to underestimate the costs and benefits of future transactions. Specifically, we put a very high weight on the present while discounting the future too heavily. We are easily enticed into taking out expensive credit to finance current consumption. Left to our own devices we don't save enough for our future needs. Furthermore, we are often overconfident about our ability to make future payments on our loans. Research shows that many people take credit cards, fully expecting to use them only for convenience and intending to pay them off in the interest-free period, but they soon become over-committed, to the delight of the banks.<sup>8</sup>

It is hypocritical when those on the 'right' talk about the virtues of choice and individualism, while overlooking the crippling effect of debt, for nothing is more assured to rob us of financial autonomy than heavy debt commitments. Yet the political rhetoric is generally about freedom versus paternalism. Iain Ramsay, of York University, Toronto, has eloquently reframed the debate:

The extent to which the state should overrule the impulsive self in favour of the planner is controversial but an *a priori* answer to this question might be rejected in favour of a more contextualised analysis of particular issues. Indeed, given the existence of behavioural biases regulation might be justified to preserve autonomy. Present choices may create potential risks to an individual's future autonomy. It may therefore be desirable to ensure that an individual does not jeopardize her future freedom.<sup>9</sup>

#### The broader policy context

There is little in behavioural economics that hasn't been known to marketing executives and advertisers for many years. The contribution of behavioural economics is to systematise this knowledge. It's a work in progress which faces a struggle against the entrenched but impoverished ideas of conventional economics.

It is clear from behavioural research that our behaviour in markets is far from 'rational'. Students endure classes where economic lecturers draw abstract indifference curves, modelling our choices between guns and butter, or beer and chips, but in those models the lecturers gloss over a fundamental assumption, namely that our preferences are predetermined and stable. But what if we don't come into the marketplace with a set shopping list and firm budget? What if we engage in impulse buying? After all, every year, firms spend \$450 on advertising for every Australian, trying to persuade us to shift our preferences and to stretch our budgets. An outbreak of mass rationality would send the advertising industry broke.

<sup>&</sup>lt;sup>8</sup> Lawrence Ausubel "The Failure of Competition in the Credit Card Industry," *American Economic Review*, vol. 81 (1991).

<sup>&</sup>lt;sup>9</sup> Iain Ramsay "Consumer Credit Regulation as 'The Third Way'?" Keynote Address *Australian Credit at the Crossroads*, Melbourne (8th-9th November 2005).

There is a clear asymmetry in public policy. We allow a reasonably free hand to advertisers, with a light hand of self-regulation, and only in a few instances, such as tobacco, do we impose strong controls. At the same time we tend to see controls on advertising as undesirable, because they distort the operation of markets. But isn't that what the marketing industry doing all the time?

More basically, as illustrated by the Haifa day care experiment, when we allow the market to extend into areas of our lives which were once governed by other norms, our behaviour changes. Any university lecturer, for example, can recount how, since the introduction of fees, students have become 'customers', who feel they are entitled to a qualification on the basis of their personal financial contribution. When our acts of kindness, borne out of consideration for others, become market transactions with the expectation of financial or other rewards, we all lose some of our claim to call ourselves 'civilised'.

In 1944, the economic philosopher Karl Polanyi warned, prophetically, of a 'great transformation' occurring in society.<sup>10</sup> Markets had traditionally been contained within society, subject to society's rules and norms. Polanyi foresaw that in the postwar era there would emerge 'market societies', in which the market would extend its reach to the extent that it subsumed all other arrangements.

That is the strongest warning from studies in behavioural economics, and it presents a challenge to those on the 'left' to become re-engaged in economics, before our entire lives are taken over by the market.

Karl Polanyi The Great Transformation: The political and economic transformations of our time (Original publication 1944, several republications).