



Economics Briefing 11

Behavioural economics – dispelling the myths

When you open up an economics textbook you will meet a very special person – *Homo Economicus*. He is often presented alone, he is selfish, and he is capable of rational decision making.

In this briefing we'll see how behavioural economics and psychology have challenged the version of 'economic man' you meet in textbooks and why this matters for policy.

Who is *Homo Economicus*?

Our friend *Homo Economicus* has two important characteristics:

1. He is a utility maximiser.

The idea of utility as something akin to happiness or wellbeing is widely accepted. The specific way it is modelled in neoclassical economics is not.

Neoclassical economics assumes that all individuals have a fixed set of preferences about the consumption of goods and services, and that they always choose the set that achieves their highest level of utility.

2. He makes rational decisions.

Rationality simply means acting in a way that is consistent with one's preferences, which sounds reasonable enough. In

practice, however, acting in a purely rational way involves (a) being capable of highly complex calculations and (b) being immune to emotion, personal bias, and the influence of other people.

You might agree, unless you're an utterly rational 'utility maximiser' yourself, that there are some sizeable differences between *Homo Economicus* and the real humans you know. Part of the work of behavioural economists has been to pinpoint these differences, in order to understand why the underlying assumptions about how individuals behave in the traditional free market model may not always hold true in real life. The examples given below present experiments and their results, in order to illustrate what behavioural economics tells us about how we behave.

Challenge 1: Are people really utility maximisers?

Behavioural economics' first set of challenges to *Homo Economicus* are to do with the concept of utility and the idea that people have fixed and well defined preferences.

People aren't selfish

Utility is often seen as being solely about people's individual self-interest. Viewed as such, the only thing that could increase someone's utility would be for them to own more things in return for as little effort as possible, i.e. being greedy and selfish.

In reality, however, people often exhibit more altruistic preferences than this. These include; caring about other people, having a taste for fairness or justice, and acting kindly towards people they don't know.

Example: The Dictator Game gives people an endowment of \$10 and gives them a choice of how much to transfer to a partner. A purely self-interested consumer would keep all the money, but over 60% of participants transfer some money, showing a taste for fairness (Forsythe et al, 1994).

To some extent this isn't a key insight of behavioural economics, because non-selfish preferences aren't always a violation of utility theory (or rationality) and many economic models show that utility can function with altruistic or caring preferences. Nevertheless, it is so common to see human behaviour being presented as purely selfish in policy models that it's worth making this distinction.

People are loss averse

One of most important discoveries in behavioural economics was Kahneman and Tversky's 'Prospect Theory' (1983). Their key insight was that people have a very different set of preferences depending on whether a loss or gain is involved, and will put much

more effort into preventing a loss than winning a gain.

Example: Consider two people; Jack and Jill. Today, they both have £50,000. Yesterday Jack had £200,000 and Jill had £500. Are they both equally happy? Utility theory would predict that they should be equally happy (as they have the same wealth now) but intuitively we think Jill will be elated and Jack very unhappy. This difference is driven by their change in wealth. (Kahneman, 2012)

Prospect theory is important, because it helps explain why people behave very differently when faced with losses and make very risky choices. This applies to policy situations. It helps explain why traders can take large risks and why redistribution of resources can be very difficult (e.g. rich people opposing tax increases for the wealthy).

People discount the future

Standard utility theory assumes time consistency, i.e. that people have the same preferences about their future plans at different points in time (see briefing 5). In practice, however, people exhibit strong biases for the present – and value things that will happen sooner more highly than things that will happen in the far-off future. This presents challenges for policy-makers who need to prioritise societal good over individual preferences. For example, what policies will be needed to provide for individuals failing to look after their health or save for retirement? How can we confront systemic issues such as the preservation of natural resources for future generations?

Challenge 2: do people make rational decisions?

Let's look at some lessons from behavioural economics experiments that tell us about how rational we really are;

People are bad at computation when making decisions: they put undue weight on recent events and too little on far-off ones; they cannot calculate probabilities well and worry too much about unlikely events; and they are strongly influenced by how the problem / information is presented to them¹. 'Making the kind of rational decisions that economists put forward in their models, would involve adherence to rules of logic that a finite mind is not able to implement' (Kahneman, 2012). Obviously, people don't go through life performing complex calculations in order to optimise their every move – and economists like Keen (2011) have spent a long time demonstrating how difficult such maximising behaviour is in practise.

Example: Here's a simple arithmetic question - a bat and ball cost a dollar and ten cents. The bat costs a dollar more than the ball. How much does the ball cost? (Why not check at the end of the briefing to see if you got it right?)

People are biased. For a decision to be rational it should be in line with a person's preferences and should not be subject to bias. In reality, however, people are strongly influenced by the way information is presented and how a problem is framed. As the following example shows, the way an issue is framed can even lead to people feeling overwhelmed to the point of inaction.

Example: Researchers found that people were willing to give more to a charity that presented the case of one

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<http://www.neweconomics.org/publications/behavioural-economics>.

individual than one which exposed the plight of millions. It seems participants were willing to take responsibility for helping one person, but felt discouraged when faced with the scale of a global problem (Banerjee and Duflo, 2012).

Another important bias stems from the fact that people base their decisions on the most readily available information in their memory. Unfortunately, such information is not always the best indication of what the future will hold. Dynamics of memory often affects how people and governments respond to risk. For instance, when people assess risk they will often respond by thinking of the worst disaster they have experienced in their lifetime, which may not necessarily be an accurate representation of the *true risks* that could affect us in the future. (Kahneman, 2012).

As well as exhibiting personal bias, people are also bad at spotting biased information being presented to them.

Example: DellaVigna et al (2007) estimate that Fox News convinced 5 to 30% of the undecided voters in their audience to vote Republican in the 2000 presidential elections.

Finally, people's decisions vary dramatically according to the emotional mood they are in – so even seemingly trivial factors like what the weather is like, and whether they have had any breakfast can influence their behaviour.

Example: A study of parole judges in Israel found that the likelihood of a person granting parole is linked to the judges' food breaks. The further away from a food break, the less likely parole would be granted (Danziger et al, 2011).

Other people's behaviour matters too. As well as having goals that involve people (as we saw above), people's decisions are often

influenced by others and guided by social pressure.

One of the most shocking examples of this is Milgram's infamous "Obedience to Authority" experiment (1963). A group of normal, law abiding people were given the task of monitoring the learning of another person, and were told by the supervising "professor" to inflict electric shocks whenever that person made an error. Despite hearing the subject scream in pain, 63% of the group escalated the strength of their shocks to a deadly level of 450 volts when encouraged by the supervisor.

A less shocking, but no less interesting, experiment was conducted by Asch in 1951. Subjects were asked to identify lines of similar length. When left to perform the exercise in isolation, people generally achieved 98% accuracy. However, when put into a high-social-pressure environment with other subjects who have been planted, a third of subjects gave the wrong answer to avoid disagreeing with the other participants.

As behavioural economics has shown, people's rational decisions can often be blown off course by social pressure. Being aware of these biases can help us structure decision-making forums in a way that allows the best possible decisions to be made.

Conclusion: Why does this matter for policy?

Many free market policies are justified on the basis that people are all rational, utility maximising agents like *Homo Economicus*, and will automatically do best when left alone to trade between themselves. By this reckoning, governments should get out of the way and allow people to act as they choose.

Behavioural economics, on the other hand, urges a much stronger role for coordinated

action and regulation, on the basis that people make consistently poor, irrational decisions about things as important as healthcare, saving for retirement and staying in school. The importance of this is magnified when we think of how our society shares resources, not just across our own generation, but across future generations too.

Behavioural economics also offers a warning for policy makers. Many of the human behavioural characteristics discussed in this briefing play out unmistakably in the policy arena, where information is highly prone to manipulation by vested interests. Policy makers (and the experts they often consult) are often no better placed than the public to assess risk and uncertainty and make rational decisions about the actions needed. Plus, even if they are aware of the need to propose potentially unpopular solutions to tackle systemic issues such as the environmental crisis, they need votes in the present to remain in power.

**Answer from page 3:*

The vast majority of people respond quickly and confidently, insisting the ball costs ten cents. This answer is both obvious and wrong.

The correct answer is five cents for the ball and a dollar and five cents for the bat.

Glossary

Utility is the level of satisfaction, happiness or wellbeing a person gets from consuming or doing something. It can be applied to small things (like how much utility you get from eating apples compared to bananas) as well as much bigger things like going to university, having children or getting married. To calculate utility economists assume that people have preferences over different combinations of goods. Utility is a subjective measure that varies from person to person depending on their preferences over different courses of action.

Preferences are an ordering of which goods and service people prefer. So people may prefer oranges to apples, or prefer getting more salary than an increase in paid holiday. Whilst economists allow different people to have different preferences, they typically assume that a given individual has preferences that are fixed – so people like what they like and know how much they like it relative to all other things.

Rationality In economics rationality means acting in a way that is logically consistent with one's preferences. So, if you have strong preferences over going on holiday a lot, deciding to work very long hours does not appear to be rational. Rational actions can appear absurd, but that is okay if the person has strange preferences. A rational person can believe in ghosts, or prefer being hated over being loved, as long as these preferences are consistent (Kahneman, 2012).

Further reading and resources

- Asch (1951) "Effects of Group Pressure Upon the Modification and Distortion of Judgement" In *Groups, Leadership and Men*, ed. Harold Guetzkow, 222-36, Pittsburg: Carnegie Press.

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The project aims to build socio-economic capacity and cooperation between NGOs and aid their engagement with all sectors using the marine environment.