

Agenda

Advancing economics in business

Behavioural economics in the European Commission: past, present and future

At the European level, behavioural economics is increasingly being integrated into consumer and competition policy, in areas ranging from the terms of consumer contracts to the design of remedies in competition cases. Emanuele Ciriolo, economist in charge of behavioural economics in the European Commission Directorate General for Health and Consumers, discusses this topic and presents some new findings from the Commission's first behavioural study on biases in consumer decision-making in retail investment services

'Let us assume ...'

Economics textbooks are characterised by an abundance of what can best be described as 'conditional sentences'. Students of economics are used to statements such as 'let's assume that there is only one good in the market ...', or 'if the agents are fully rational and perfectly informed, then ...'. This profusion of if-clauses in the neoclassical economist's phraseology has also inspired some of the many jokes about economists. One famous joke, which used to be told by US economist, Paul Samuelson, goes as follows.

A physicist, a chemist and an economist are stranded on an island, with nothing to eat. A can of soup washes ashore. The physicist says, 'Let's smash the can open with a rock.' The chemist says, 'Let's build a fire and heat the can first.' The economist says, 'Let's assume that we have a can opener ...'

This sort of mockery or self-irony has served, if anything, to preserve the status quo and to deflect all criticism. It did not spur any particular theoretical shift or any change of approach until the 1990s, when behavioural economics started besieging the stronghold of neoclassical economics by challenging some of its strictest and most controversial theoretical assumptions.

Behavioural economics studies how people *actually* make choices, drawing insights from both psychology and economics. It analyses individuals' decision-making processes using replicable and incentive-compatible laboratory and field experiments. It attempts to fill the gap between standard economic

theories and the real economy. Through its new insights into people's most basic economic behaviours, it improves our understanding of how the economy works. Behavioural evidence shows, for example, that people are sensitive to the way in which information is presented and that, in making decisions, they do not always behave in a 'fully rational' manner. That is to say:

- people's decisions are influenced by how choices and options are framed and presented to them (ie, by the *framing or choice architecture*);
- consumers' choices are significantly affected by *default options*;
- people often make *myopic* decisions;
- people also show inertia in their behaviour, caused by *loss aversion*;
- although people may benefit from wider choice and richer information, beyond a certain level they are likely to suffer from *choice and information overload*;
- people often rely on *heuristics*, or 'rules of thumb', in making decisions, rather than fully evaluating all courses of action. While these can be useful on a day-to-day basis, they can also lead to biases.

Behavioural economics seeks to correct for the lack of realism in the 'dismal science'. Indeed, there is now increasing consensus among economists that behavioural economics helps to provide a more realistic representation of how the economy *actually* works compared with traditional economics alone. A special issue of the *Quarterly Journal of Economics* was devoted to behavioural economics in 1997, and more recently the 2002 Nobel Prize in economics was awarded to two researchers working in the field.

The views expressed in this article are those of the author.

The criticism of the traditional approach has further increased since the recent burst of the umpteenth 'bubble', which has created a snowball effect on the whole financial system, leading to the most serious financial crisis since 1929. After all, if agents were rational and 'asset prices could be relied upon to always be "right", these bubbles would not occur'.¹ The crisis, on the contrary, has shown that even the most informed, competent and aware investors failed to make optimal choices, and displayed some kind of bounded rationality.

As an example, in February 2010 the Mortgage Bankers Association sold its headquarters building in Washington for \$41m. It had bought it for \$80m in 2007, when its president stated that 'owning their own building was the smartest long-term investment for the association'.² It was forced to sell after only two years, making a net loss of \$40m. It is worth noting that these were not vulnerable consumers; they were professionals with the deepest knowledge of the market. Examples like this provide a reality check and should encourage policy-makers to question standard economic assumptions. Indeed, the occurrence of the crisis has implicitly called for a change in the mainstream analytical framework and has given further impetus to behavioural economics.

First attempts to apply behavioural economics to EU policy-making

From a policy perspective, relying on unrealistic assumptions about people's behaviour may have severe consequences. If people's behaviour is primarily due to lack of knowledge or information then conventional education or information campaigns could constitute an appropriate remedy. If, on the contrary, people's behaviour reflects fundamental aspects of human nature (such as default bias, present bias, loss aversion, overconfidence, etc), a more effective approach would be to take biases into account when designing policy. Identifying the reasons underpinning people's behaviour is therefore an essential prerequisite for effective policy-making.

It is worth noting that behavioural economics is not biased towards more regulation. Indeed, it has the potential to protect consumers while avoiding any unnecessary burden on firms. For example, a behavioural study on information disclosure for mortgage contracts, carried out by the Federal Trade Commission, shows that no intervention is sometimes the best solution.³ Indeed, behavioural economics could be used to inform a libertarian, liberty-preserving form of paternalism, as advocated in *Nudge* by Thaler and Sunstein, two renowned thinkers of the Chicago School.⁴

At the European level, behavioural economics is implicitly starting to be incorporated into policy-making, and this has led to some cases of debiasing through law. The cooling-off period, found in much of EU consumer protection legislation, and the health claims proposal are two early examples. The cooling-off period—the time span during which customers have an unconditional right to cancel a contract—is a remedy advocated to allow consumers to act on regrets due to myopia or impulse buying.⁵ Similarly, the Health and Nutritional Claims Regulation (No. 1924/2006) lays down harmonised rules for the use of health or nutritional claims (such as 'low fat', 'high fibre' and 'helps lower cholesterol') on foodstuffs, based on nutrient profiles.⁶ This is intrinsically related to the 'framing' issue above, since in the past consumers were often misled by changes in the reference point (a cheese containing 20% fat was often labelled as 80% fat-free).

In addition, in response to the evidence on the impact of default options,⁷ the European Commission has proposed a Directive on Consumer Rights, which includes a clause limiting the use of default options in consumer contracts.⁸ Specifically, sellers would be required to obtain express consent from consumers for any payment that is in addition to the payment for the main contractual obligation, and could not rely on default options that require buyers to reject those options in order to avoid payment.⁹

In the past three years, the European Commission has also hosted two high-level and well-attended international conferences on behavioural economics, aiming to raise awareness among its public and private stakeholders. In the first of these events, European policy-makers learnt about the available behavioural evidence, while researchers found out about the specific needs of policy-makers. The first conference was deemed a success and convinced public bodies around Europe of the added value of the behavioural approach. As a result, two innovative and recent policy-inspired behavioural studies were presented at the conference that took place in November 2010. The Office of Fair Trading presented its study on 'Advertising of pricing',¹⁰ and the Commission unveiled the results of a behavioural study on consumer decision-making in retail investment services.¹¹

Current work on behavioural economics

Although DG Health and Consumers paved the way in the application of behavioural economics to policy-making, other European Commission services are now following suit. DG Information Society and Media has undertaken groundbreaking work on trust and the use of 'new media' to connect directly with

citizens and consumers.¹² A study conducted on behalf of DG Environment on consumer behaviour relating to the purchasing of environmentally preferable goods aimed at finding out whether real behaviours differ from the predictions of 'rational' economic models.¹³ DG Research has explicitly recognised the need for a better understanding of consumer behaviour, and this was introduced for the first time in the Seventh Framework Programme (FP7).¹⁴ DG Justice is actively following the first large, and still ongoing, behavioural study financed by the FP7 on privacy and the digital economy.¹⁵

DG Competition used behavioural insights in a recent competition case, in relation to the bundling of the Microsoft Internet Explorer web browser with Windows.¹⁶ In this case, a different remedy was adopted from what the European Commission had done in the past. Users of Windows-based PCs were provided with the option to choose an alternative browser, via an on-screen ballot box. This remedy pushes consumers to make an active choice as to their preferred browser, and implicitly removes the impact of the default option.¹⁷ The available evidence suggests that the remedy is more effective than the traditional ones adopted in the past: among the users who viewed the ballot box, one in four downloaded an alternative browser. A simple device, which imposed no antitrust fee and virtually no programming cost to Microsoft, translated *de facto* into an EU market for browsers that is substantially more competitive. The recent increased rate of innovation in this sector further strengthens this finding.

Finally, the aforementioned behavioural study on consumer decision-making in retail investment services¹⁸ was jointly conducted by DG Internal Market and Services and DG Health and Consumers, and its results will inform the ongoing review of the regulatory framework on packaged retail investment products.

First behavioural study by the European Commission, and future applications

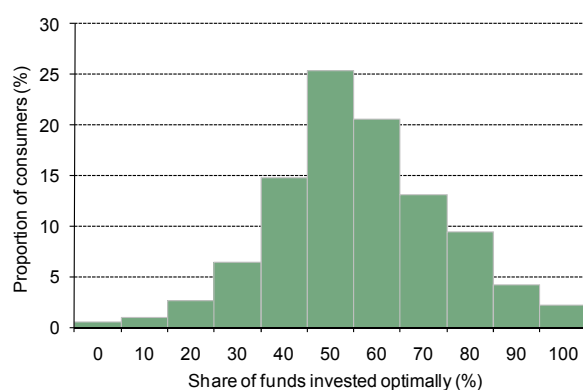
The European Commission's first behavioural study, on consumer decision-making in retail investment services¹⁹ was a follow-up to the findings of the 2009 Consumer Markets Scoreboard, which identified the retail investment services market as one of the worst-performing markets for consumers.²⁰ Other evidence also suggested that the financial environment has evolved so much that consumers are often ill-prepared to make sound decisions about increasingly complex retail financial products.²¹ The inability to benefit fully from this market is in part due to limited financial literacy or asymmetric information, but it may also be directly related to behavioural traits and market features driving consumers towards choices that are inconsistent with their long-term preferences.

The novel aspect of the study was a series of online and face-to-face experiments conducted with 6,000 consumers in eight EU countries, which produced a number of striking results. For example, it showed that people struggle to make optimal investment choices, even in very simplified investment tasks. Only 56% of funds in the experiment were invested optimally, with 25% of investment decisions being completely optimal and only 1.4% of subjects making all five investment choices optimally (see Figure 1). It also confirmed that investment decisions are prone to biases and framing effects. Subjects made worse investment decisions when the optimal choice was harder to understand (when fees were framed as percentages, and annual returns were not compounded over the duration of the investment), and they were disproportionately averse to uncertainty, ambiguity and product complexity. Somewhat surprisingly, disclosing conflicts of interest elicits a 'knee-jerk' reaction that can be harmful as well as helpful. Subjects exhibited the opposite behaviour in their investment choices when biased incentives were disclosed.

In terms of policy recommendations, the results of the study suggest that standardising and simplifying product information can improve consumer choices, whereas disclosing the adviser's bias may have varying effects depending on how strong the 'health warnings' are.

The impact of the study goes beyond its direct application in the sector of retail investment services. Indeed, its results confirm that disclosure of information alone will often not be sufficient to provide consumers with what is needed to optimise their understanding and decision-making, and the resulting outcomes. In this sense, the study breaches the limit of conventional regulation, still largely stuck in two competing models: product restrictions and disclosure.²² This study was not only about *product restrictions*, because the vast

Figure 1 Money allocation between two alternative investment products



Source: European Commission (2010), 'Consumer Decision-Making in Retail Investment Services: A Behavioural Economics Perspective: Final Report', November.

majority of financial products on the market are not inherently unreasonable. And it was also not just about *disclosure*—the regulation of which is largely based on the artefact of the *homo economicus*—because we found compelling evidence of sub-optimal decision-making. Instead, the study produced innovative considerations of the design and implementation of regulation, including features such as the framing of information and the provision of warnings.

For the same reasons, behavioural economics could have wide applications, from work on better regulation, to policy interventions concerning innovation and the information society. It is also relevant to a number of areas where individual behaviour is functional to the achievement of common objectives, from sustainable development to the prevention of child obesity; from sustainable mobility to the promotion of new energy sources; from energy efficiency to growth and employment policies.

Indeed, apart from consumer policy, the insights of behavioural economics could be applied to any policy intervention that seeks to shape the behaviour of individuals, or where the individuals' response to it helps to determine its effectiveness. Businesses already rely on thorough knowledge of individual

behaviours to increase their sales. If policy-makers want to influence behaviours, they should follow suit and master these innovative approaches.

The methods, tools and insights of behavioural economics could also be used for testing remedies, and there are strong arguments for incorporating behavioural economics in the Impact Assessment procedure. Indeed, behavioural economics constitutes an effective and reliable tool for gathering specific evidence that could inform the appraisal of policy proposals. It could provide complementary information for the identification of the problem, as well as for the analysis of the impact of the policy options.

The first behavioural study on retail investment services was meant to be a pilot exercise with a view to designing a framework contract, open to all services of the European Commission, to analyse behavioural issues in relation to policy-makers' decisions. Such an approach could not only translate into more appropriate and effective policies, but also eventually contribute to making European institutions more in tune with European citizens. This is already a very good resolution for 2011 and for the challenging years ahead of us.

Emanuele Ciriolo

- ¹ Thaler, R. (2009), 'The Price is Not Always Right and Markets can be Wrong', *Financial Times*, August 5th.
- ² Hagerty, J.R. (2010), 'Mortgage Bankers Association Sell Headquarters at Big Loss', *The Wall Street Journal*, February 10th.
- ³ Lacko, J.M. and Pappalardo, J.K. (2007), 'Improving Consumer Mortgage Disclosures: An Empirical Assessment of Current and Prototype Disclosure Forms', Federal Trade Commission Bureau of Economics Staff Report, June.
- ⁴ Thaler, R. and Sunstein, C. (2008), *Nudge: Improving Decisions About Health, Wealth and Happiness*, New Haven: Yale University Press.
- ⁵ European Parliament (1997), 'Directive 97/17/EC of the European Parliament and of the Council of 20 May 1997 on the protection of consumers in respect of distance contracts'.
- ⁶ European Commission (2007), 'EU regulation 1924/2006 on Nutrition and Health Claims made on Food'.
- ⁷ There is a wide literature on defaults. Some of the most relevant studies are Beshears, J., Choi, J., Laibson, D. and Madrian, B. (2008), 'The Importance of Default Options for Retirement Saving Outcomes: Evidence from the United States', pp. 59–87, in S.J. Kay and T. Sinha (eds), *Lessons from Pension Reform in the Americas*, Oxford: Oxford University Press; Johnson, E.J., Hershey, J., Meszaros, J. and Kunreuther, H. (1993), 'Framing, Probability Distortions, and Insurance Decisions', *Journal of Risk and Uncertainty*, 7:1, pp. 35–53; Johnson, E.J., Bellman, S. and Lohse, G.L. (2002), 'Defaults, Framing and Privacy: Why Opting In–Opting Out', *Marketing Letters* 13:1, pp. 5–15; Johnson, E.J. and Goldstein, D.G. (2003), 'Do Defaults Save Lives?' *Science*, 302, pp. 1338–9; Whan Park, C., Jun, S.Y. and MacInnis, D.J. (2000), 'Choosing What I Want Versus Rejecting What I Do Not Want: An Application of Decision Framing to Product Option Choice Decisions', *Journal of Marketing Research*, 37:2, pp. 187–202.
- ⁸ European Commission (2008), 'Proposal for a Directive of the European Parliament and the Council on Consumer Rights', COM(2008) 614 final.
- ⁹ See also Organisation for Economic Co-operation and Development (2010), *Consumer Policy Toolkit*, OECD, Paris.
- ¹⁰ Office of Fair Trading (2010), 'Advertising of Pricing', London.
- ¹¹ European Commission (2010), 'Consumer Decision-Making in Retail Investment Services: A Behavioural Economics Perspective: Final Report', November.
- ¹² European Commission (2010), 'Consumer 2020: From Digital Agenda to Digital Action', May 23rd.
- ¹³ Policy Studies Institute (2009), 'Designing Policy to Influence Consumers: Consumer Behaviour Relating to the Purchasing of Environmentally Preferable Goods', study for DG Environment.
- ¹⁴ Details available at http://cordis.europa.eu/fp7/ssh/home_en.html.
- ¹⁵ See <http://www.consent.law.muni.cz/>.
- ¹⁶ See http://ec.europa.eu/competition/consumers/web_browsers_choice_en.html.
- ¹⁷ See also Oxera (2010), 'Behavioural Economics, Competition and Remedy Design', *Agenda*, November.
- ¹⁸ European Commission (2010), 'Consumer Decision-Making in Retail Investment Services: A Behavioural Economics Perspective: Final Report', November.
- ¹⁹ *ibid.*
- ²⁰ European Commission (2009), 'Consumer Markets Scoreboard', COM (2009) 25 final.
- ²¹ See, for example, Engelmann, J.B., Capra, C.M., Noussair, C. and Berns, G.S. (2009), 'Expert Financial Advice Neurobiologically "Offloads" Financial Decision-Making under Risk', *Plos One*, 4:3; and Financial Services Authority (2008), 'Consumer Purchasing and Outcomes Survey'.
- ²² Barr, M., Mullainathan, S. and Shafir, E. (2008), 'Behaviourally Informed Financial Services Regulation', New America Foundation.

If you have any questions regarding the issues raised in this article, please contact the editor, Dr Gunnar Niels: tel +44 (0) 1865 253 000 or email g_niels@oxera.com

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