

# DOING WHAT COMES NATURALLY

## NEW USES OF BEHAVIOURAL ECONOMICS

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In the past 20 years, behavioural economics has become mainstream. Nobel Prizes were awarded to the psychologist Daniel Kahneman in 2002 and the economist Richard Thaler in 2017, public bookends to the massive body of academic literature produced in the intervening period. Behavioural insights are used by companies, providing new disciplines around retailers' instincts about the positioning and pricing of products on shelves and websites; and by a number of policy-makers across the world, with the help of special units set up to disseminate the techniques across public services. But perhaps the most significant development has been the use of behavioural economics by regulators, most notably in the UK and the US, for which its insights offer a range of options for lighter-touch, less prohibitive interventions, or "nudges". Frontier has developed its own multidisciplinary approach to the use of these techniques in regulation to establish the desired consumer outcomes.

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Behavioural economics has been a powerful corrective to the “rational” assumptions of classical economics. It has released economists from the straitjacketed model of a consumer who consistently and persistently pursues welfare-maximisation. Embracing behavioural economics has allowed businesses to systematise their intuitive understanding of their customers, suppliers and colleagues. It has opened up new ways of thinking, bringing novel solutions to business challenges.

This strand in economics, the most powerful addition in a generation, has also been an inspiration for change in policy-making. Recently, however, the influence of behavioural economics has perhaps been most strongly felt in many countries in changes to the approaches of regulators, particularly, of course, those most focused on competition and consumers rather than pipes and wires. Most evidently, behavioural insights have been used in the design of regulatory interventions, and the testing of these in randomised controlled trials.

But this is only the beginning. Behavioural economics can greatly enrich our understanding of markets and their failures, at a critical moment in the evolution of political thinking about capitalism itself. And, in a period when faith in free markets has suffered from the experience of the global financial crash, austerity and the backlash against globalisation and inequality, it can help policy-makers and regulators steer a difficult course between heavy-handed state control and unpopular laissez-faire. In this chapter, therefore, we take a closer look at what behavioural economics has to offer, and how strategists, policy-makers and regulators are putting it to use.

## WHAT'S IT ALL ABOUT?

There are few strands of economics, or for that matter other fields of academic study, that have become as extensively popularised – and popular – as behavioural economics. Nobel laureate Daniel Kahneman's *Thinking Fast and Slow* (2011), Richard Thaler's and Cass Sunstein's *Nudge* (2008) and Daniel Ariely's *Predictably Irrational* (2008) were all international best-sellers, and still rank high in the book charts.

Yet there is little unanimity on a definition of behavioural economics. The dictionary version, “economics with elements of psychology” is actively misleading, since it treats these two sciences as distinct. The point is not that you can pile up bits of each in a kind of academic junk-box, but that they combine into a more powerful way of thinking about economic behaviour.

The popularity of Kahneman et al stems from the fact that although some of their insights may be counter-intuitive, the behaviours they describe are instantly recognisable. And that is so even if we never thought to describe them in such a disciplined way, or subject them to the exhaustive tests that lie behind the literature.

Box 1 describes some of those behavioural insights that have become, as a result, almost part of the ordinary language of business, policy-making and regulation, and so mark out some of the uses of behavioural economics without defining it. And in our own work at Frontier, we have developed a multidisciplinary approach that helps us answer questions we face in our work, as well as designing ways in which we test our answers.

The key questions involved in almost all our work are:

- What drives behaviour?
- Which types of behaviour are the most important to change?
- What is the most cost-effective way of changing behaviour?
- How can we change competitive outcomes?

Competitive businesses have always sought to understand their customers' behaviour and looked for ways to influence that behaviour – be it through marketing, store arrangement or proposition design. What behavioural economics adds is a systematic approach to exploring human behaviour in the economic context. And the key insight is that most human decision-making is unconscious.

Most of the time, our subconscious decision-making processes are extremely useful. But occasionally they can lead us astray. Different academics and practitioners describe the subconscious influences on our decision-making process in different ways: while some talk about specific biases, Frontier's approach is to think in terms of broad behavioural traits, as a starting-point towards an understanding of what might be going on in any given situation.

Whichever approach to these insights you take, however, while it is helpful to have a lexicon of recognisable behaviour, the key learning from the vast (and growing) literature is that interventions aimed at changing customer behaviour can have unexpected effects. This means that a systematic approach to testing different interventions and their impact is essential. And, in turn, this leads to perhaps the biggest change in the way economists approach problems: with a focus on trialling and experimentation, and with a much deeper knowledge of how different techniques for behavioural trials can be applied.

#### BOX 1

## SIZING UP THE SHORTCUTS

**The first thing most people get to know about behavioural economics is that it looks at what we do unconsciously as well as consciously – in particular, the way we rely on what we know or feel comfortable with to reduce the effort involved in decision-making. And the first group of these energy-savers you are likely to meet in a quick dip into the subject come under the heading of “bias”.**

**At least 150 of these have been identified and tested, but those most commonly cited include:**

- **Confirmation bias** – our tendency to search for, interpret, focus on and remember information in a way that confirms our own preconceptions.
- **Distinction bias** – our tendency to view two options as more dissimilar when we evaluate them simultaneously than when we look at them separately.
- **Hyperbolic discounting** – our preference for payoffs today rather than tomorrow, leading us to make choices that our future selves might prefer us not to have made.
- **Availability bias** – our tendency to give too much weight to top-of-mind evidence or ready-to-hand information.

**But of course behavioural insights go much deeper. At Frontier, we have developed a framework of nine behavioural traits in unconscious human decision-making, relevant to our work. The list starts from the principles on how human decision-making (i.e. our brains) works, captures the essence of the material in a much shorter list and sets a positive frame on the analysis. It aims to capture the most significant ways in which behaviour might differ from that assumed in classical economics, but it is not meant to be exhaustive. Nor are there strict boundaries between these traits, and our behaviour may be driven by more than one at a time.**

- **Priming** occurs when something we experience influences how we react subsequently. Decisions we arrive at depend on where we start from. For example, a number of experiments have shown that showing the contractual minimum payment on credit card statements tends to lead customers to make lower repayments than if that information is omitted. If it's not shown, the mental journey starts from the outstanding balance rather than the contractual minimum.
- **Framing** similarly describes how information presented around a choice affects how we make it. (Box 2, taken from the work of Daniel Kahneman and Amos Tversky, describes a famous experiment designed to test this.) It's a behavioural trait of great importance to regulators or policy-makers trying to “nudge” people into taking certain actions, as well, of course, as to retail businesses equally bent on encouraging customers to make purchases.
- **Loss/risk aversion** describes how we generally prefer to act in a way that will minimise the risk of us feeling bad in the future (rather than maximise the potential gains). Daniel Kahneman has described the extent of this aversion as the most important insight of behavioural economics. We are naturally averse to making losses, both financially and emotionally: and we may watch repeats of our favourite TV shows instead of trying a new one. In a US field experiment, a group of 150 teachers in Chicago were randomly allocated to two groups: the “gain” group were given a bonus if their students met a certain standard. The “loss” group were given bonuses upfront, but had to pay them back if their students didn't meet the standards. The result: students taught by the “loss” group did significantly better at end-of-year tests.
- **Attention** describes our tendency to focus on some things while ignoring others. Humans have evolved to be masters at filtering out much of what is going on around us. Try Transport for London's “Awareness Test” on YouTube to find out how, when our conscious attention is focused on one thing, we can fail to see something else even though it is directly in our field of vision.

- **Association** is another of the shortcut ways in which our minds work by linking things together. When we encounter something new, we give it meaning by linking it to something else: for example, studies have shown that coffee tastes different in different colour mugs.
- **Reward** describes our tendency to act in a particular way because we believe it will make us feel good. One reason why most people brush their teeth regularly is that we get an immediate reward: our mouths feel cleaner and fresh. Flossing doesn't deliver the same immediate reward. And that's why most people don't floss as often as their hygienist tells them to.
- **Ease and habit** describe our general tendency to like whatever requires least cognitive effort. Studies using functional magnetic resonance imaging (a brain scanner) have shown that there is less evidence of reasoning when people make a choice between a pair of very similar products if one of the pair is their favourite brand. Inertia describes a similar trait: for example, countries where people need to opt out of being organ donors have registration levels close to 100%, while those with opt-in registration typically have levels below 20%.

- **Social proof** describes our constant tendency to adapt our behaviour to fit in with people around us, often without realising it. Businesses and policy-makers are becoming increasingly skilled at using this tendency to influence behaviour. For example, the "please re-use your towel to save the environment" message in hotels has been shown to be more effective if rephrased "most guests who have stayed in this room re-used the towels..."
- And, more broadly, **heuristics** describe the wide range of mental shortcuts we use for an awful lot of decision-making, based on what we have found to work in the past. These can apply to anything from ducking your head as you go through a doorway (you banged your head when you didn't) to choosing the second-cheapest wine in a restaurant because...well, the wine list's awfully long, and you don't know anything about it, and...that's what you always do. ■

## HORSES FOR COURSES

Much of the research underlying today's behavioural economics began in the 1950s. But it is only in the past 20 years that it has come into general application in business strategy, public policy design and regulatory interventions.

Understanding customer behaviour and being able to influence it are key to success in any business, but the tools of behavioural economics are obviously of greatest use in retail industries.

At Frontier, we have used them, for example:

- to help businesses encourage the take-up of digital services (see Box 3 for an example)
- to design customer journeys in online and offline environments
- to help design and trial new products
- to reshape the approach to customer service.

In each of these tasks, identifying the behavioural traits in customer responses was key to improving outcomes. But the uses of behavioural economics do not begin and end at the customer interface: we have, for example, used these tools to help redesign risk management strategies.

# HORSES

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## KILL OR CURE?

In a famous experiment designed by Daniel Kahneman and Amos Tversky, a group of people are asked to choose between two responses to the outbreak of a disease threatening 600 people:

- Option A will save 200 lives.
- Option B has a one-third probability that all 600 will be saved and two-thirds probability that none will be saved.

Most people (72% in the original study) choose Option A.

Another group is asked to choose between:

- Option C, in which 400 people will die.
- Option D, which has a one-third probability that nobody will die and a two-thirds probability that all 600 people will die.

Most people (78% in the original study) will choose Option D.

Plainly, A and C are identical, as are B and D. And for the individual, the odds of surviving are the same (one in three) in all four. But the “positive framing” of the first pair (which emphasise the saving of lives) makes people prefer A; while the “negative framing” of the second pair (which emphasise the loss of lives) makes them readier to take what looks like the riskier option of the two, i.e. D. As Kahneman and Tversky observed, these response are:

*...as common among sophisticated respondents as among naive ones, and it is not eliminated even when the same respondents answer both questions within a few minutes. Respondents confronted with their conflicting answers are typically puzzled. Even after rereading the problems, they still wish to be risk averse in the “lives saved” version; they wish to be risk seeking in the “lives lost” version. ■*

## WORTH THE EFFORT?

An insurer was faced with high drop-off rates in their newly developed robo-advice journey for pensions.

We applied behavioural insights to the online customer journey to develop hypotheses of why customers were dropping off. For example, this included decision fatigue, priming effects at the start of the journey and framing and ordering of the specific questions. To help test these hypotheses we used a behavioural dataset provided by the client, that included customers’ behaviour with the robo-advice service. This enabled us to explore behavioural actions and map the customer journey, including the barriers to completion (which customers are dropping off, at which points, how long did they spend on the page etc.).

We then ran creative workshops with the client in which we redesigned the customer journey based on the behavioural insights that created a set of prioritised changes for testing.

The new process that was implemented after the testing was easier for customers but also for the client to manage and resulted in a significantly increased conversion rate. ■

## LIGHTENING UP GOVERNMENT

The UK has been a front-runner in the application of behavioural insights to a wide range of policy issues. The UK's Behavioural Insights Team was only created in 2010, as one of those let's-see-how-it-goes units that spring up in the Cabinet Office. By 2014 it had become a social purpose company, and was enjoying the flattery of imitation around the world.

Governments in the US, Singapore, Australia, the Netherlands and Germany, to name just a few, all have their own “nudge” units. In the UK and elsewhere, behavioural insights have been applied to policy issues ranging from public health and energy conservation to back-to-work schemes and tax collection.

For policy-makers, behavioural economics offers ways to achieve policy goals with relatively minor interventions in people's lives – with “nudges” rather than handcuffs. In the UK, explicitly behavioural approaches have been applied in a number of areas, including policies to:

- increase prompt payment of fees imposed by courts
- increase organ donation rates
- improve tax compliance
- reduce the number of missed hospital appointments.

A common theme across the work has been the application of models of human behaviour and extensive use of randomised controlled trials to identify interventions that have the highest impact.

Outside the UK, behavioural economics has entered the policy arena to various degrees. In some countries, behavioural economics is explicitly used as a policy-making tool, either by government departments, or through academic and other advisers. For example, the Danish Nudging Network has over a hundred members, including government ministries, local authorities and other public sector bodies. In Germany, however, while behavioural economics is discussed extensively, it has not had much explicit application to public policy-making.

Improving the functioning of labour markets has long been a focus of the UK Behavioural Insights Team, and in its new international incarnation it has partnered with the Australian Government in projects to bring the most disadvantaged back into work and to increase the take-up of wage subsidies; with the insurance company Allianz to bring injured teachers back into work sooner; and with the police force in Tennessee to improve diversity in recruitment. It has also worked on projects as diverse, geographically and topically, as increasing medication adherence rates for tuberculosis sufferers in Moldova, and boosting early tax returns in Indonesia.

## AT THE REGULATOR'S ELBOW

Since consumer behaviour is the focus of many of the concerns of economic regulators, it is not surprising that they should reach most enthusiastically for new behavioural insights. Customer inertia, low levels of “switching” between providers, the disadvantages faced by the vulnerable in complex markets – all worries that have stimulated regulators to search for interventions in the market that are effective but light touch. In particular, the UK's competition and consumer regulators (the Office of Fair Trading and its successor the Competition and Markets Authority) and the Financial Conduct Authority have embraced behavioural economics as a part of their toolkits. An important focus has been on behavioural barriers to switching.

In the chapter on price discrimination in regulated markets, we explore the impact levels that switching may have on the pricing of goods and services. But the basic economic point is that market competition depends on customers choosing between providers. To unlock the benefits of competition in markets where the product being sold is a relationship rather than a single purchase, it is vital that customers are prepared to switch. Helping them to do so means making switching easy, and behavioural insights as well as technology are needed to achieve this. It is these that have moved regulators on from the classical economist's focus on “information asymmetries”, which could be addressed by providers sending customers yet more unreadable “disclosures” designed by compliance officers, to finding out “what works” by focusing on customer behaviour. Improve switching, and markets will work better.

It has been an evolutionary process. Along the journey, there was a time when the UK competition authorities seemed to see a price comparison website as a solution in almost every consumer market they looked at, including home-collected credit and extended warranties. And in some markets, some customers became better informed and made better choices.

Similarly, customer-targeted information does sometimes have an effect. The UK's FCA found that putting last year's premium on renewal notices for home insurance stimulated a sizeable increase in renegotiation or switching. But such methods do not work in all markets or with all customers (this one was far less effective with respect to motor insurance). And regulators became increasingly concerned about the most vulnerable consumers.

If customers are not engaged in the market in the first place, it is not likely that further information – however clearly laid out – will make much of a difference. When the UK's FCA ran a sizeable randomised controlled trial testing different options for summary boxes on savings account statements, it found they drove only a tiny uplift in internal switching (i.e. from one savings product to another offered by the same provider), while external switching didn't increase at all. In the US, the mandated “summary prospectus” has not prevented investors from choosing mutual funds with higher fees.

**“ACTIVE  
DECISION-MAKING  
IS EFFORTFUL,  
WHICH IS WHY WE  
UNCONSCIOUSLY  
SEEK TO AVOID IT”**

## ACTING BY DEFAULT

Simplifying information, and looking at ways in which information can be provided in an effective and engaging manner, have been the natural starting-point for regulators' journey with behavioural economics. After all, it is hard for a regulated business to take exception to being asked to be clear about what it is offering customers. Using techniques that work on the “attention” and “habit” traits described in Box 1 can be more controversial.

An insight from behavioural economics is that active decision-making is effortful, which is why we unconsciously seek to avoid it, and therefore slide easily into whichever is the “default” (decisionless, effortless) position. So when regulators determine default positions, they affect a lot of consumers: setting these is a powerful regulatory intervention.

Automatic enrolment into pension schemes (in the UK, employees must actively opt out) is a classic example. Automatic enrolment has transformed the level of retirement saving into formal pension schemes in Australia, New Zealand and the UK. Moreover, a high proportion of members of defined contribution schemes also slide into the default option for an investment strategy. Trustees have an obligation to ensure this is generally appropriate (not easy in today's world of complex retirement options); but it would clearly be preferable to “nudge” as many scheme members as possible into active choice.

The EU's Consumer Rights Directive, which came into force in 2014, has certainly taken this view with respect to pre-ticked boxes in online sales. Notably, customers no longer need to untick boxes in order to opt out of travel insurance when buying an air ticket.

## SILVER BULLETS?

When the FCA published its first work on behavioural economics in 2013, it made much of the use of “salient bullets”. The brand new conduct regulator had conducted a randomised controlled trial with an insurance broker, as a part of a mis-selling investigation. As a result of a failure in the insurance broker’s processes, a large number of customers were owed relatively small sums (£10 or so) in compensation. The trial involved the measurement of responses to different versions of the letter informing customers, which found that the use of salient bullets to highlight key information made a more significant difference than any other feature that was trialled.

The FCA’s experience confirms the wider finding in the behavioural economics literature that salience carries more weight than importance, with clear implications for how communications should be designed. This sometimes means giving less salience rather than more: for example, in an experiment carried out by the European Commission, it was found that people given financial advice on the choice between two investment products would, if prominently reminded of the adviser’s potential conflict of interest with respect to one of these products, tend to make a less advantageous choice of the other – in short, they would give the reminder too much weight. Once again, this demonstrated our preference for salient and easily digested information to the less familiar.

# SALIENT

# BULLETS

WEB

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## DEEDS AND WORDS

Insights from behavioural economics have steadily increased its influence on the design of regulatory interventions. But these behavioural techniques are equally applicable at an earlier part of the regulatory process, namely in helping to advance the regulator's understanding of how markets operate and how customers make choices in the market.

A greater focus on their use at this level could help regulators set priorities for their work, and create a stronger evidence base to support or reject intervention. To what extent is a particular market outcome driven by one of the recognisable traits of human behaviour, rather than effective competition? Could we/ should we try to change that? Could we conduct a trial to see what behavioural nudges (if any) might be most effective? There is likely to be a greater use of such a sequence of linked questions making full use of behavioural economics in the future.

Another useful application may be research into customers' attitudes. For example, regulated financial services firms are required to "treat customers fairly". But how do customers interpret this requirement? Is it "fair" for long-standing customers to be charged more than new ones? Or is it only "unfair" if they can't easily take their custom elsewhere?

Most importantly, perhaps, how do customers' perceptions of fairness affect the way they behave? Behavioural economics has helped us to understand how often we say one thing and do another. That enables regulators to make a better stab at working out how to nudge us into doing something different. But it still leaves the question: does what we say – about fairness, for example – still matter? The issues surrounding loyalty pricing are explored further in our chapter on pricing. But the broader questions explored in these final two paragraphs show that behavioural insights have a lot more to give, both to public policy and its regulatory execution.

### BOX 4

## AFFECTING CUSTOMERS THROUGH FRAMING AND ADVERTISING

**Early behavioural economics work by the UK's Office of Fair Trading looked at how customers' decision-making was affected by the way in which prices were framed and advertised. This was based on laboratory experiments (rather than real-life investigation), in which the participants were asked to make choices between differently framed prices for identical goods. In each case, participants were given a straight per-unit price, but the "frame" was varied through different techniques:**

- **Drip-pricing** – the customer sees only part (say, £5) of the full price upfront, with increments taking it to the full £10 dripped in throughout the buying process.
- **Pre-sale comparisons** – "was £20, now £10".
- **Complex pricing** – the unit price requires some computation – "£15 each, 3 for the price of 2".
- **Baiting** – a "limited number offered" at the "special price" of £10.
- **Time-limited offers** – "available until Saturday at a special price" of £10.

**Classical economics does not easily allow for demand to be affected by such techniques, but behavioural economics experiments can be used to show that they do affect demand – and in particular circumstances, it can show by how much. In this experiment drip-pricing and time-limited offers seem to have had the most distortive effect on customer choices – i.e. to have had the greatest potential to have a negative effect on consumer welfare. ■**