



People do not always make rational choices.

Behavioural economics

Playing a leading role in the life insurance industry revolution

Technology is changing every aspect of our lives and is a factor in the paradigm shift that our industry is currently experiencing, with change reaching both a pace and scope never seen before. This technological revolution is – thankfully – challenging the age-old adage that insurance is sold, and not bought.

Part of the change that we have seen technology bring to our industry has, of course, been the advent of underwriting engines and, going hand in hand with that, the growth of the direct-to-consumer (DTC) sales channel. This development gives us greater access to write business in the middle market – a market which around the globe has been historically underserved by the adviser force. Thus far, direct distribution has not and is not expected to displace traditional channels; rather, it is helping insurers to reach consumers in a simple, fast and trusting environment¹.

Along with the growth and development of technology solutions, we have seen the rapid emergence, increasing awareness and growing acceptance of the field of behavioural economics (BE). BE studies the effects of psychological, social, cognitive, and emotional factors on the economic decisions made by individuals and institutions and the consequences for market prices, returns, and resource

allocation². More simplistically, it is psychology as it relates to the economic decision-making process of individuals and institutions. Behavioural economics has been widely adopted in various fields, with BE now playing an integral role for many academic and government organisations, advisory bodies, public health groups, expert panels³, and last but certainly by no means least, corporations, including insurers and reinsurers.

Traditional economic theory tells us that people act rationally, making decisions that maximise the value they receive from a product or service by weighing up the costs and benefits of each choice⁴. The real world experience is, however, that people do not always make rational choices – indeed the science of BE suggests that decision-making is 10% rational and 90% emotional⁵. The principles of BE seek to explain the reasons for this.

The highly regarded psychologist Daniel Kahneman is one of the founding fathers of BE and author of the international bestseller ‘Thinking, fast and slow’. Kahneman has completed decades of research in psychology, culminating in the award of the 2002 Nobel Prize in Economic Sciences – an honour he would have shared with his research partner of several decades, Amos Tversky, who had sadly passed away previously.

Kahneman established a cognitive basis for common human errors which arise from heuristics and biases and, with

¹ See PwC. (2012) Insurance 2020: Turning change into opportunity.

² See Lin, T.C. W. (2012). A Behavioral Framework for Securities Risk. 34 Seattle University Law Review 325.

³ See National Institute on Aging, National Institutes of Health. (2013). Psychological Science and Behavioural Economics in the Service of Public Policy.

⁴ See Dolan, P., Hallsworth, M., Halpern, D., King, D. & Vlaev. (2010). Mindspace: Influencing behaviour through public policy. Retrieved from Cabinet Office, Institute for Government website

⁵ See Grant, K. (2014). Consumer Emotion – Measuring Trust, Value and Loyalty in the Protection Area. Hannover Re InFocus

Tversky, developed 'prospect theory'. Heuristics are commonly defined as cognitive shortcuts or 'rules of thumb' that simplify decisions, representing a process of substituting a difficult question with an easier one (Kahneman, 2003). Heuristics can lead to cognitive biases. Cognitive biases are systematic errors in thinking, in the sense that judgement deviates from what would be considered desirable from the perspective of accepted norms or correct in terms of formal logic⁶. Kahneman & Tversky's groundbreaking 1979 paper 'Prospect Theory: An Analysis of Decision under Risk' challenged the then accepted economic concept of utility theory (the theory that people make rational choices to maximise their satisfaction) by documenting how people tend to behave differently under risk, depending on whether they are facing a potential loss or a potential gain.

Kahneman has suggested that people have two modes of thought – fast thinking, or intuition (system 1) and reasoning, or slow thinking (system 2)⁷.

When making complex decisions we use both systems (system 1 edits or simplifies, system 2 evaluates and reasons); however, our reasoning just accepts the answers that our intuition provides.

Yet intuition is not always right and biases in decision-making can occur when intuitive processes lead people astray. Prospect theory proposes that people behave differently under risk according to whether they are facing a potential loss or a potential gain, underweighting outcomes that are merely probable in comparison to outcomes that will be obtained with certainty⁸. In other words, why buy a life insurance policy which will only come with a possibility of being claimed on, but will most certainly cost me money? Furthermore, they suggested that, psychologically, people are loss-averse, i.e. they attach much greater weight to losses than gains – why lose 1,000 in buying a life insurance policy that will probably not result in any gain?

Behavioural biases

There are a number of key behavioural biases in the field of BE which affect consumer decisions about financial products⁹. Such biases can lead our potential clients to delay

the buying decision, buy the wrong type of product, not buy the level of cover they require or, indeed, not proceed with a purchase at all. Some examples of such biases include:

Present Bias: Time-inconsistent preferences or preferences for immediate gratification. The 'enjoy it now, worry about it later' mind-set, which provides a partial explanation of why consumers discount future eventualities. Rather than dwelling on unpalatable future possibilities, today's consumers focus on the here and now – instead of providing for the unimaginably distant prospect of retirement or future illness, they focus on 'just in time' financial planning¹⁰.

Bounded willpower: This suggests we have trouble following through on rational plans.



When presented with many different moving parts our rationality is bounded.

Bounded rationality: When presented with complex difficult maths or many different moving parts, we often make decisions that are not in our best interests. Rationality is bounded because there are limits to our thinking capacity as well as the available information and time.

Loss aversion: Psychologically, people attach much greater weight to losses than gains. Studies have shown that losses are felt roughly twice as much as gains of the same magnitude¹¹. An important BE concept associated with

⁶ See Samson, A. (2014) *The Behavioural Economics Guide 2014* (with a foreword by George Loewenstein and Rory Sutherland) (1st ed.).

⁷ See Kahneman, D. (2011). *Thinking, fast and slow*. New York. Farrar, Straus and Giroux

⁸ See Kahneman, D. & Tversky, A. (1979). *Prospect Theory: An Analysis of Decision under Risk*. *Econometrica* 47(2), 263-292

⁹ See Erta, K., Hunt, S., Iscenko, Z. & Brambley, W. (2013). *Applying behavioural economics at the Financial Conduct Authority*, Occasional Paper No.1.

¹⁰ See Grant, K. (2013). *Navigating a route for protection*. Hannover Re InFocus

¹¹ See Kahneman D, Kneutsh JL, & Thaler RH. (1991) *Anomalies: the endowment effect, loss aversion and status quo bias*. *J Econ Perspectives*, 5(1), 193-20

prospect theory, loss aversion is captured by the saying ‘losses loom larger than gains’¹².

Status quo bias: This can be defined as the path of least resistance, or default – continuing to do what one has been doing; sticking with what worked in the past is a safe option as long as previous decisions are good enough¹³. This bias is evident when people prefer to have things stay the same by doing nothing.

Framing: This is part of prospect theory; choices can be worded in a way that highlights the positive or negative aspects of the same decision, leading to changes in their relative attractiveness. Different framing approaches have been identified, including, for example, goal framing – i.e. offering a USD 5 reward vs imposing a USD 5 fine.

Overconfidence: This is observed when people’s subjective confidence in their own ability is greater than their objective (actual) performance¹⁴.

Why buy a life insurance policy which will only come with a possibility of being claimed on, but will most certainly cost money?

If we consider the above BE biases, it is easy to see why people delay the decision to purchase life insurance, buy the wrong product or amount, or do not make the purchase at all – and, perhaps, why the global issue of the protection gap persists to this day. Twenty years ago, you could only buy life insurance from an agent. Today, you can buy life insurance everywhere – at the supermarket, from an adviser, on the internet, over the phone. Yet despite this, on a global basis, sales are down – greater accessibility has not resulted in an increase in consumption. BE and its associated sciences gives us some insights into how we can address this.

Industry use of BE

We can look around the globe to see various examples of successful application of the principles of BE, with business, regulators and policymakers using these insights to better

understand market and consumer behaviour. In Australia, the Chairman of the Australian Securities and Investments Commission (ASIC), Greg Medcraft, has noted that evidence-based studies of how people think and behave in the real world are going to play an increasingly important role in smarter regulation, given the valuable insights that they provide into how people make decisions and how ASIC can improve outcomes¹⁵. Likewise in the UK, the Financial Conduct Authority (FCA) has noted that people often make errors when choosing and using financial products and can suffer considerable losses as a result. With the aid of BE we can understand how these errors arise, why they persist and what can be done to ameliorate them¹⁶.

The recognition from regulators that we can use the principles of BE to ameliorate our clients’ buying errors and better inform them is a wonderful endorsement of BE.

From the life insurance industry perspective, it has become clear that there are many clients, particularly in the middle market, who do not want to be sold to; rather, they want to make informed decisions when it comes to buying life insurance. In order to help them to do so, we must develop systems and strategies that are agile and capable of adapting to different buying situations, and we must have products available that are simple enough for them to understand. We know that a protection gap exists in most countries and we also know that the reasons for this are product complexity, price (with most people over-estimating the price), lack of trust in the industry, a complex buying process and failure to recognise the need. Adopting the principles of BE, we can overcome many of these obstacles by understanding people’s behaviour better, helping them to overcome their biases and make better choices.

Hannover Re has experience in tailoring solutions to individual clients’ needs, including using the principles of BE in doing so – whether it be framing a question or using goal framing to reward healthy behaviours on the part of policyholders. We would be pleased to assist your organisation in utilising the fundamentals of behavioural economics to enhance your client offering.

¹² See Kahneman, D. & Tversky, A. (1979). Prospect Theory: An analysis of Decision under Risk. *Econometrica* 47(2), 263-292.

¹³ See Simon, H.A. (1956). Rational Choice and the Structure of the Environment. *Psychological Review* 63(2): 129–138. Doi:10.1037/h0042769

¹⁴ See Samson, A. (2014) *The Behavioural Economics Guide 2014* (with a foreword by George Loewenstein and Rory Sutherland) (1st ed.)

¹⁵ See ASIC. (2015). Increasing use of behavioural economics across its regulatory business

¹⁶ See Erta, K., Hunt, S., Iscenko, Z. & Brambley, W. (2013). Applying behavioural economics at the Financial Conduct Authority, Occasional Paper No.1. Retrieved from Financial Conduct Authority website

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