

This is a self-archived pre-print version of an article that is now subject to copyright.

Please cite as follows:

**“Behavioural economics and financial services marketing: a review” Swee-Hoon Chuah, James Devlin
International Journal of Bank Marketing 09/2011; 29(6):456-469. DOI: 10.1108/02652321111165257**

BEHAVIOURAL ECONOMICS AND FINANCIAL SERVICES MARKETING: A REVIEW

ABSTRACT

Purpose

It has been argued that the insights provided by behavioural economics have profound implications for the study and practice of marketing. The purpose of this paper is to provide a detailed analysis such insights help enhance understanding of aspects of marketing and consumer behaviour in financial services markets.

Approach

In this paper, we look at various facets of behavioural economics which we feel provide particularly important and salient insights in the context of financial services. In particular, we study loss aversion and prospect theory, status quo bias and defaults, framing and anchoring effects, hyperbolic discounting, availability effect and salience and over-confidence. In doing so, we provide a number of examples from the financial services context which provide insightful and informative insights for both commercial practitioners and policymakers. In each case, we introduce and explain the relevant phenomenon, before providing a number of applications and examples from the financial services domain.

Findings

We find that the insights afforded by behavioural economics are useful in helping to explain various aspects of consumer behaviour in financial services markets. We show that an understanding of the implications of behavioural economics may help in fashioning a choice architecture that is more likely to bring the desired consumer response, from either a commercial or policymaking perspective.

Practical Implications

Our analysis provides important insights for those responsible for the marketing of financial services, policymakers in the financial services domain, third sector agencies seeking to foster greater engagement with financial services and other interested parties.

Originality and Value

Our paper adds value by drawing together various aspects of behavioural economics, providing an analysis of their relevance to financial services marketing and offering numerous examples and applications.

Key Words: Marketing Financial Services, Behavioural Economics, consumer behaviour in financial services

Paper Category: Conceptual Paper/Literature Review

BEHAVIOURAL ECONOMICS AND FINANCIAL SERVICES MARKETING: A REVIEW

INTRODUCTION

It has been posited that insights provided by behavioural economics have profound implications for the study and practice of marketing (Mitchell, 2010). Equally, perspectives provided by behavioural economics have been advanced as effective in helping to understand consumer behaviour in financial services markets (Dixon, 2006; de Meza, 2008). In this paper, we seek to illustrate and explain how various insights offered by behavioural economics help enhance our understanding of marketing and consumer behaviour in financial services markets and to explore implications for firms, policymakers and other interested parties. Behavioural economics is an umbrella term for a range of approaches that seek to understand and explain observed consumer behaviour more accurately than predictions associated with traditional economic theory. Traditional economics is based on the assumption that people act in a completely rational and instrumental, or self-interested, manner. People are assumed to take full account of all information available to them and to act according to this information and their preferences. In doing so, their goal is assumed to be maximisation of their utility. Standard economic models incorporate such assumptions, as, by implication, do any marketing strategies or regulations and policies based upon such models. For instance, recent approaches to consumer policy in the UK are effectively predicated on the notion of the rational consumer. The working hypothesis has been that provided consumers are supplied with as much information as possible and efforts are made to improve their financial capability, then consumers should make more informed and suitable choices in financial services markets.

However, it is increasingly apparent that rational, “information-processing” models do not accurately explain actual or observed consumer behaviour. An increasing body of evidence points towards persistent and consistent violations of outcomes expected according to a rational, or information processing, perspective (Thaler and Sunstein, 2008). These violations occur for various reasons, including the mental effort required to make informed decision, faulty reasoning on the part of consumers and the complexity of the decision making process. From an economic perspective, such observed behaviour would be regarded as irrational and would be characterised as anomalous. However, as such behaviour is observed consistently and the evidence is relatively robust, departures from what economists consider to be rational

need to be recognised and explained, rather than ignored or discounted as mere aberrations. Such alternative models of consumer behaviour also need to be accounted for by financial services policymakers and by firms seeking to influence consumer choice in financial services markets.

It is perhaps not surprising, therefore, that there has been growing interest in the subject of behavioural economics, a relatively recent addition to the study of economics which tries to explain such anomalies with reference to consumer psychological insights. Increasingly, it is recognised that we cannot study human behaviour as a “black-box” (i.e. not concerned with the process of behaviour merely the outcomes as predicted by economic models), we need to open the box and look into the cognitive processes that drive human behaviour. The objective of behavioural economics is to bring psychological insights into economics in a systematic manner, in order to improve economic theory, so that it can better explain human behaviour. In doing so, the impact of the typical mental short-cuts, or heuristics, that consumers employ in their decision making are taken into account, as are other systematic biases, anomalies and framing effects that impact on consumer choice and behaviour.

This paper considers a number of important insights from behavioural economics which may be of interest and use to marketers and policymakers in the financial services sector. Our objective is to review and apply to a financial services context a number of salient insights offered by behavioural perspectives. It would not be practical to attempt to be all encompassing in our coverage. Rather, we choose to focus on elements of the behavioural economics approach which we think provide the most important and useful insights. Implications for those responsible for formulating consumer policy in financial services receive particular attention as it is in this area that the potential impact of behavioural perspectives is particularly profound. We investigate loss aversion, status quo bias, framing effects, hyperbolic discounting and mental accounting, all of which deal with biases in the judgment of alternative outcomes that arise due to the way these outcomes are presented, appraised and compared. We also detail the availability effect which is an example of how biased information collection and processing results in erroneous beliefs. Finally, we look at overconfidence and trust, which are factors besides utility maximisation that may influence the selection between alternatives, giving rise to actions which would be considered erroneous from the standpoint of traditional economic theory. We have chosen these particular facets of behavioural economics as we feel that they provide particularly important

and salient insights in the context of financial services. In this paper we focus on implications for interactions with financial consumers, rather than dealing with wholesale markets and macro-economic matters. In the main section of the report, the various phenomena introduced above are introduced and explained briefly, before examples from a financial services context are provided.

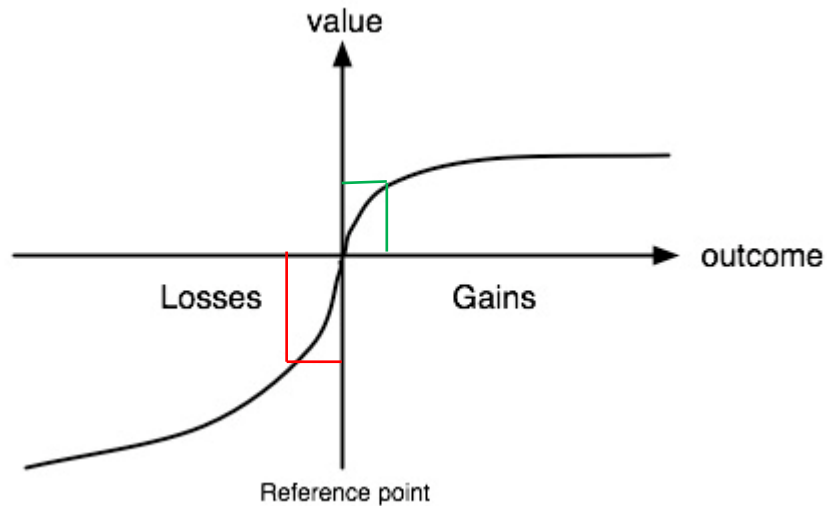
BEHAVIOURAL ECONOMICS AND CONSUMER BEHAVIOUR IN FINANCIAL SERVICES

Loss Aversion, Prospect Theory, the Disposition Effect and the Endowment Effect

Explanation

People have been shown to be loss averse, generally appearing to dislike losing something roughly twice as much as they like gaining it (Kahneman, et al, 1991; Thaler and Sunstein, 2008). Such a phenomenon has been shown in a number of experimental studies in a broad range of contexts (Tversky and Kahneman, 1991; Benartzi and Thaler, 1995; Camerer, et al, 1997). Loss aversion can be explained by prospect theory (Kahneman and Tversky, 1979), which states that an individual's value function (whether for money or otherwise) is *concave* for gains but *convex* for losses. In other words, people are more sensitive to losses compared to gains of similar magnitude. This is illustrated in Figure 1. The reference point in the diagram is the current position of the individual concerned. Gains and losses are evaluated with reference to this neutral reference point. The value function takes an asymmetric S-shape because marginal value (or sensitivity) declines as absolute gains and losses increase in size.

Figure 1: Prospect Theory, the Value Function and Losses and Gains



Loss aversion and Prospect Theory are also related to the Disposition Effect, which refers to the tendency of investors to continue holding assets that have dropped in value and to sell assets that have increased in value (Kahneman et al, 1990). Also closely related is the Endowment Effect, which is the tendency of individuals to place a higher price or value on an object if they own it than if they do not. Put simply, according to standard economic theory, what we are willing to pay for a good should be equal to what we are willing to accept to be deprived of it. However, experimental studies have shown that we generally demand more money to part with something once we own it than we would be willing to pay for it in the first place (Knetsch, 1989; Kahneman, et al, 1990).

Applications

The loss aversion witnessed on the part of consumers helps explain why there is a marked reluctance on the part of many financial services consumers to invest in assets that involve a risk to capital, such as stock market based investments. Many individuals have portfolios that are under-diversified and where risky assets are generally under-represented. Mandatory product warnings which highlight the prospect of losses on collective investments such as unit trusts and OEICS may exacerbate such issues. It is accepted that individuals should not be encouraged to take on risks which do not accord with their risk preferences. However, in the long run, underexposure to risky assets may involve detrimental outcomes for investors as such assets tend to offer the prospect of greater returns and increased protection from the erosion of capital from inflation. For such reasons, particularly for long-term term investments such as pensions policies, for most people an element of exposure to stock market

investments is generally considered desirable. Therefore, investment choices offered to investors, whilst warning them about attendant risks, should also point out the potential rewards and risks associated with not incorporating some stock market exposure into an investment plan. One method of achieving this would be to present appropriate default options, as discussed in more detail below. The most obvious application of the disposition effect in financial services relates to the tendency of individuals to continue to hold stock market investments for far too long in the hope that they will recover in value rather than cut losses, sell up and invest in something with greater potential. The endowment effect has also been shown to hold for financial markets, where private client sellers have a tendency to place orders demanding a price that is further away from current market prices than buyers (Furche and Johnstone, 2006). The endowment effect may also help explain investors' tendency to continue to hold large amounts of shares that they have acquired through employee share ownership schemes, rather than diversify as would generally be considered prudent.

Status Quo Bias and the Default Option

Explanation

The term *status quo bias* was advanced by Samuelson and Zeckhauser (1988) to explain the tendency to stick with current choices/patterns of behaviour, in other words to have an exaggerated preference for the status quo. Sticking with the status quo involves less mental effort than considering more pro-active courses of action. An example of the status quo bias is as follows; when a University added some new options to its employment-based healthcare plan, faculty joining after this point understandably took advantage of most of the options. However, faculty previously employed (who of course had the right to take advantage of the new options) chose to participate in the new options to a far lesser degree (Samuelson and Zeckhauser, 1988). They exhibited a strong preference for sticking with the status quo. In situations where there is not an existing pattern of behaviour, or status quo, then the default option is very important in guiding choice. For example, if a certain feature is offered with a financial policy unless individuals state that it is not wanted, then take up of that feature tends to be far higher than if individuals have to pro-actively opt into the feature (Johnson, et al, 1993).

Applications

The status quo bias and the notion of defaults are brilliantly simple in conception, intuitively obvious and, arguably, second nature to many a marketing manager who has used "opt-outs"

to sell additional product features, such as payment protection insurance in the past. Another common way in which firms exploit the status quo bias is to offer a “free subscription” for a fixed period, which then reverts automatically to a full payment contract unless the customer actively cancels the subscription. At least one of the authors has learned through experience that, despite the best of intentions, such subscriptions rarely get cancelled and has hence decided not to subscribe to such offers!

However, despite their apparent obviousness and common currency in the commercial world, financial services policymakers are arguably only now realising the full potential of exploiting the status quo bias and defaults. One obvious example is automatic enrolment into personal pension plans. Note that this is not the same as compulsion, as an individual retains the right to opt-out. However, as long as opting-out becomes a conscious choice and requires some effort on the part of the individual, most tend not to. Automatic enrolment has proved to be successful in increasing contributions to such schemes in the US (Bernatzi and Thaler, 2007). In the UK, an automatic enrolment pension will be phased in for employees who do not currently have a pension and will be known as the National Employment Savings Trust (NEST) (Office of Public Sector Information, 2010). It is hoped that the introduction of NEST will help reduce the savings gap in the UK and increase personal provision for retirement. However, with respect to NEST, much detail is still to be finally decided and ultimately, the success or otherwise of the scheme will be at least partially dependent on such details.

As discussed above, closely related to the status quo bias is the tendency of individuals to stick with the default option offered, rather than make a conscious decision. The default option is an important part of what has been termed “choice architecture” (Thaler and Sunstein, 2008), which encapsulates how choices are framed, or presented, to individuals. Effective choice architecture helps steer individuals towards what would generally be considered the most appropriate choice (in as much as experts are able to agree what that might be!).^A

^A This is an important point! True libertarians who favour complete freedom of choice would not accept that anybody other than the individual concerned is in a position to judge what is in his or her best interests. The debate surrounding choice architecture and the appropriateness of “nudging” individuals in a certain direction is predicated on the notion of liberal paternalism, as the authors of Nudge point out. They characterise liberal paternalism as a soft form of paternalism, where no choices are barred, but individuals are steered in certain direction deemed preferable for them and perhaps also for society in general.

The authors of “Nudge”, a highly accessible introduction to the area of behavioural economics, provide a number of examples of how defaults may be important in a financial services context (Thaler and Sunstein, 2008). They include one from their own employer, the University of Chicago. Each year, during an “open enrolment period” employees of that institution can change decisions they have made about benefits and pension contributions. This must be done online. As the authors point out, Professors may be sufficiently busy, absent minded or (surely not) generally disorganised that they somehow do not get round to logging on. Therefore, a default must be decided upon. If the default is to continue the rate of contribution previously stipulated, then this will lead to a far higher level of pension provision than if contributions are reset to zero for the considerable proportion of staff who do not get round to doing anything in the time available.

In the case of pension contributions, the preferred default from a public policy perspective is reasonably clear-cut, as most would agree that regular and consistent payments into schemes should be maintained if at all possible. Indeed, there may be an argument that the default should be to set a steadily increasing contribution year-on-year, up to a maximum percentage of salary. Such “save more tomorrow” schemes have proved successful in the US, where opt out rates have been shown to be as low as 6% (Thaler and Sunstein, 2008) and the many that don’t opt out will have far healthier retirement funds as a result of steadily increasing contributions. However, for certain other types of benefits the most suitable default option may be less clear cut. Some organisations offer shorter term regular savings schemes or flexible spending accounts. It is less obvious in this case whether it should be assumed that an individual wishes to continue saving as before, as such saving may have been for a specific short term objective which has been achieved (for instance to purchase a new car). A related issue is whether annual car insurance policies should automatically renew in the absence of any correspondence from policyholders. Traditionally cover has lapsed unless a policyholder indicates to the existing provider that he/she wants to renew. However, increasingly, companies are moving to the default being automatic renewal, which at least ensures that drivers are not left without cover due to an administrative oversight!

Defaults may also have an important role to play in an individual’s portfolio allocation decisions. Fund investment decisions will have a highly significant impact on returns enjoyed, particularly over a longer term time frame. Traditionally, in many cases, investors have been presented with a list of funds in which they may invest along with copious amounts of

information on each fund detailing investment strategy, main holdings, fees, past performance and so on. Investors undoubtedly have all of the information necessary to make a rational, informed choice consistent with their investment objectives, risk preferences and other factors. However, in practice, investors often opt for the default option provided. Related to this, they may employ simple rules of thumb, or heuristics, to simplify the process of choice. Again, excellent examples have been provided in the financial context, from which the following discussion draws (Thaler and Sunstein, 2008). For a period academics in the US could choose between two funds as part of their defined contribution pension plans. One invested exclusively in fixed interest securities and bonds. The other invested mainly in company shares, or equity. Well over half of investors in the plan chose to allocate their contributions 50:50 between the two choices. Over the long term, given historical precedents, such an investment allocation is likely to bring a significantly lower rate of return than an allocation which favours shares to a greater degree. Therefore, the heuristic or rule of thumb of splitting allocations equally between alternatives may not be the most appropriate strategy, although it does at least guarantee some diversification. Generally, research has shown that investors have a tendency to follow what has been termed the *1/n rule* and the main insight is that the set of funds offered to consumers and the manner in which the choice is presented is likely to have a profound impact on investment decisions (Benartzi and Thaler, 2001; Thaler and Sunstein, 2008).

Armed with this information, policymakers can use it to their advantage, particularly when considering default options for automatic enrolment, defined contribution plans, such as the soon to be introduced NEST scheme in the UK, the introduction of which is being overseen by the Personal Account Delivery Authority (PADA). PADA carried out a wide-ranging consultation exercise in summer 2009 with the objective of eliciting views on how an investment approach can be implemented which achieves the best results for investors and a primary concern highlighted was what the default investment strategy should be (Personal Accounts Development Authority, 2009). Numerous responses were received and these have subsequently been summarised, however, little consensus emerged. The PADA aims to issue a statement of investment practice before spring 2011 and in formulating such a strategy they would do well to heed the insights available from behavioural economics.

Of course, many millions of pounds continue to be invested through private defined contribution schemes with private companies. In the main, consumers are left to their own

devices when making investment decisions for private funds, although of course a number will take advice. It is a moot point whether policymakers should concern themselves with such investment choices and introduce regulatory requirements regarding the default options offered by commercial firms. It could be argued that such an approach is required to ensure that investors are pursuing strategies that are suitable to their needs. Indeed, given the regulatory imperative to “Treat Customers Fairly” (TCF) (FSA, 2007) and that outcome two of the TCF regime highlights the imperative to design products that meet the needs of identified customer groups, it could be argued that companies have an obligation to incorporate appropriate default options into products to ensure that investors have the greatest chance of achieving their objectives in a suitable manner.

Framing Effects and Anchoring Effects

Explanation

The appraisal of alternative options can also depend on the way the choice is presented, or “framed”. How information is framed can have profound implications for consumer behaviour and, in particular, consumer choice. People have a preference for positive rather than negative frames, an effect which follows on from loss aversion. For instance, in choosing cancer treatment, 82% of patients preferred surgery over radio therapy when surgery was described as having a 90% survival rate. However, only 56% preferred surgery over radio therapy when it was described as having a 10% mortality rate. These two pieces of information are factually equivalent; however, there exists a strong bias in favour of the positive frame (McNeill, et al, 1982). Although framing is often discussed with reference to positively versus negatively presented information, it applies to the presentation of information more generally, particularly where factually equivalent information can be presented in alternative formats. For instance, a fee or rate of return expressed as a percentage may provoke a significantly different behavioural response to the same factual information expressed in absolute monetary terms. The anchoring effect is a type of framing effect where the appraisal of options is affected by an original starting value (or anchor). This is despite the anchor being arbitrarily chosen. For example, when asked to value the same property after being given different anchor values, real estate agents gave valuations that were significantly correlated with the arbitrary anchors provided (although 90% of them denied being influenced!) (Northcraft and Neale, 1987).

Applications

The crucial lesson from the framing literature is that consumer choice is highly dependent on how information is presented, or framed, and that factually equivalent information can provoke a very different response when framed in a different manner. One example relates to the framing of pricing, an example of attribute framing. It is likely that the typical customer would take a very different view of being told that he/she is paying a 3% up-front charge as opposed to £3000 when deciding whether or not to invest £100,000 into an investment product, not least as many in the population struggle to understand percentages fully. With this in mind, it is perhaps surprising that expressing fees as a percentage of funds invested is being proposed as acceptable under the ongoing Retail Distribution Review (FSA, 2009), which aims to make charging transparent at the point of sale.

Another area in which framing has a crucial role to play in financial services is in relation to the presentation of past performance statistics. This is another example of attribute framing. In one sense, it is surprising that potential investors pay any attention at all to such statistics as they are warned that past performance is no guide to likely future returns and the weight of evidence shows little relationship between past and prospective returns (Fama, 1970; Brown and Goetzman, 1995; Carhart, 1997; Rhodes, 2000). However, as such data is readily available and one of the few search attributes (i.e. available prior to purchase and use) that consumers can access, it is not surprising that many investors rely on such data when making fund choices (Mussweiler and Schneller, 2003; Mitchell and Utkus, 2004). Research has shown that the timescale used in past performance presentation can influence investment decisions (Thaler and Benartzi, 1999), as can whether identical data on past performance is presented in a line graph or as a bar chart representing annual yields (Diacon and Hasseldine, 2007).

Framing may also be influential in determining the degree of risk exposure that investors choose. Consider the following example of how an individual's choice can be manipulated depending on how that choice is framed (Goodman, 2002). Firstly, assume that potential investors are presented with three alternative funds labelled *conservative*, *moderate* and *aggressive* from which they have to choose one for their investment. The investors are told that the proportion invested in risky assets is 0%, 40% and 80% respectively in one case and 40%, 70% and 100% respectively in an alternative scenario. Given the tendency to choose the middle option when forced to select one fund, investors will end up with a significantly different exposure to risk depending on how the choice is framed relative to the underlying

risk associated with the investment. Presentation of the level of risk associated with investment choices and other associated information is a key consideration for those responsible for ensuring the successful introduction of NEST pensions and is related to the discussion of presentation of default investment options discussed above.

Framing effects may also help account for the rising popularity of valued-added bank accounts of the type offered by all major banks. The promotional material for such accounts often frames the benefit associated with such accounts with reference to the overall cost of individual elements of the package. However, in practice it is unlikely that all associated services are of use/interest to many account holders, so actual savings will be much smaller.

Hyperbolic Discounting and Procrastination

Explanation

Intertemporal decisions are those in which the decision maker makes value comparisons between immediate and delayed consequences and an individual's decision in such circumstances will be influenced by his/her time preference. Traditionally, economists have attempted to make sense of time preferences using the concept of an individual discounting rate (IDR) - the rate at which the individual is willing to trade immediate for delayed outcomes. The IDR reflects what an individual wants as compensation for the delay. The IDR will be higher the more an individual is orientated towards the present. Early discounting models have generally assumed that the individual should be consistent in their intertemporal choices, so that their IDR is constant over time and across situations. However, IDR is observed to decline with time horizon, showing a hyperbolic rather than exponential function. In other words, the longer the delay, the larger the factor by which people discount the value of the future outcome (Laibson, 1997). IDR also declines with the size of the outcome (Benzion, et al, 1989). Moreover, consistent with Prospect Theory, IDR for gains has been found to be much higher than for losses of similar magnitude (Loewenstein and Thaler, 1989). To put all of this into a simple phrase; people have a tendency to prefer short-term gratification over longer term returns. The effects of hyperbolic discounting may be exacerbated by our tendency to procrastinate. When a consumer is aware that prompt action would be in his/her interests but nevertheless delays taking action then procrastination is said to occur (de Meza, et al, 2008).

Applications

When people are deciding whether or not to invest for the long term, into investment vehicles such as pension plans, one of the key trade-offs they are making is between present consumption and the ability to fund consumption in the distant future. They are also deciding whether to start investing now, or shortly. The Pension Commission summed up the challenge posed by individuals' tendency to engage in hyperbolic discounting very neatly when they explained that an investor would be willing to forgo some current expenditure now for the prospect of enjoying a more comfortable retirement in 20 years, however that same individual would be less willing to sacrifice current consumption in the short term and is therefore likely to defer starting to save for a pension until "next year" (Pensions Commission, 2004). Of course, next year, even more so than tomorrow, never comes, so many may never start saving of their own volition. This corollary of hyperbolic discounting helps explain the need for an automatic enrolment pension scheme which takes advantage of the status quo bias and also gives some backing to the old adage that products such as pensions are not bought, but instead have to be sold. The implications of hyperbolic discounting also have implications for the types of marketing messages that may be effective in encouraging individuals to enrol immediately. In this respect, it is important to emphasise the highly undesirable consequences of delaying entry into a scheme. Money invested relatively early has the most time to grow and provides the opportunity for greatly enhanced fund size. Even a delay of a few years can damage potential returns significantly and companies should continue to emphasise this crucial point in the clearest terms wherever possible.

Mental Accounting

Explanation

Mental accounting occurs when sums of money are treated and valued differently depending on where they came from and/or where they are kept (Thaler, 1985). Mental accounting violates the standard economic assumption that money is "fungible", meaning that all money is treated equally regardless of its source or destination and doesn't come with labels on. The following provides an example of how the law of fungibility may be breached: We suggest that most people coming to a store to buy a lamp for £50 would travel to a different branch 5 minutes away if told that they could buy the same lamp at the other location for a special sale price of £25, thereby saving £25. However, most people coming to a store to buy a dinner table set for £1500 would *not* travel to a different branch 5 minutes away if told they could buy the same set at another store for £1475. In both cases, the trade-off is a gain of £25 for 5 minutes

of time. However, in the former case, the £25 is compared to £50, whereas in the latter case, it is compared to £1500. According to standard economic theory, £25 should be equally valued regardless of source and if it is worth 5 minutes of an individual's time, then it should be in all cases.

People also have separate mental accounts for different categories of spending and are reluctant to transfer spending from one account to another (Thaler, 1999). The most famous illustration of this is the behaviour of New York taxi drivers. A study revealed that these taxi drivers work shorter hours on good days (when there is much custom) and longer hours on bad days. This contradicts traditional economic theory, which says that they should work longer hours on good days so as to maximise their monthly income. The explanation is that these drivers have a separate mental account for each day and set daily earning targets. Each day, they stop working once their target is met, which happens quicker on good days and vice versa (Camerer, et al, 1997).

Applications

The fact that people tend to engage in mental accounting can have both positive and negative consequences for financial services consumers. Many households have different accounts (in many cases literally but sometimes metaphorically) for everyday expenditure, saving for holidays, saving to fund education of children and so on. In one sense, this may help individuals and families to budget, as they can ensure that they do not over-commit in terms of expenditure in any one area and can control overall expenditure more effectively as a result. However, there are also potentially negative consequences. It is not uncommon for a financial services consumer to have large outstanding balances on store and credit cards that are carried over month by month and sufficient funds to settle the balances in one or more savings accounts simultaneously (Gross and Soules, 2002). From a financial perspective this is unlikely to make sense, as the rate of interest charged on outstanding balances on store and credit cards is likely to be significantly higher than the rate of return on savings. Also, it has been argued that in periods where investors are enjoying significant stock market returns, they have a tendency to take far more, and perhaps excessive, risk with their gains, which they treat in a slightly different manner to the funds initially invested (Thaler and Sunstein, 2008). Mental accounting may also help explain why many investors appear to be willing to pay perhaps thousands of pounds in commission, rather than a few hundred pounds in the form of a fee when taking investment advice. Commission isn't paid explicitly by the investor, but

is normally deducted from funds prior to investment. This is in stark contrast to a fee, which has to be paid directly from the investor to the advisor. Of course, post-RDR implementation fees will be the norm, but it may well be that investors remain reluctant to pay them.

Availability Effect and Salience

Explanation

People judge the likelihood of an outcome occurring by how easily the outcome can be brought to mind or imagined. They are said to rely primarily on evidence which is most easily available to them and/or evidence that has particular salience. As such, they usually overestimate the likelihood of outcomes that are particularly memorable, highly emotional or have happened recently (Kahneman, 2002; Mahdon and Paxton, 2004). For instance, due to the popularity of the movie *Jaws* and the large amount of hype associated with the reporting of shark attacks, people tend to assume that they are more likely to be killed by sharks than by falling aeroplane parts, although in truth, the latter is 30 times more likely (Dixon, 2006). Another example is the high level of insurance purchases made immediately after disasters such as floods and earthquakes, which gradually decline when memories fade (Slovic, 1987). The availability effect is also used as a heuristic when people make inferences about what is likely to happen based primarily on events of which they have direct experience. An example of this is when people resort to the old adage “Well, granddad chain-smoked all his life but was never ill and lived to the age of 90” when deciding whether or not to quit smoking. This is a classic example of ignoring the overwhelming weight of evidence in the public domain in favour of a case–study based on an unrepresentative sample of one person.

Applications

Insurance companies may well be able to exploit the knowledge that an individual is far more likely to purchase insurance that covers the consequences of natural disasters by using promotional activities that stress the availability and salience of such events. Many may be of an age which means that they remember the Commercial Union advertising campaign from the early 1980s with the strap-line “We won’t make a drama out of a crisis”. These factors may also help explain the tendency for investors to invest too much money in the stock market when it has enjoyed a period of strong growth and too little when it has been falling and prices generally represent a bargain. From a policymaking perspective, the important lesson is to

ensure that availability and salience are used where possible to re-enforce the positive outcomes associated with desired behaviours.

Overconfidence

Explanation

People have a natural tendency to be overconfident. It is a well-documented psychological bias (Zaleskiewicz, 2006; Thaler and Sunstein, 2008). People's confidence systematically exceeds the accuracy of their choices. For example, when given market reports of twenty stocks and asked to predict stock price changes, people rated their own accuracy in prediction at 68% while the actual accuracy was only 47% (Lichtenstein and Fischhoff, 1977)(which is consistent with the random walk hypothesis). Most people also think they are above average drivers, that they are more likely to live longer than others and are more likely to outperform the class average when studying (Slovic, 1987). However, only laypeople making decisions display significant overconfidence. Experts are usually more realistic in their expectations.

Applications

The fact that individuals display overconfidence in many facets of their life may well help explain why large numbers of consumers opt to forgo the opportunity to insure themselves against unforeseen circumstances, as they have a misplaced confidence that such occurrences are less to happen than is actually the case. Hence the old adage that insurance isn't bought, but needs to be sold (Schiff's Insurance Observer, 2006). It may also explain why most investors choose actively managed funds rather than passive index trackers, when evidence suggests that there is a greater chance that their managed fund will underperform the relevant index (and tracker fund) rather than outperform it (Thaler and Sunstein, 2006). The investor in question may be overconfident in his/her ability to pick a fund that is likely to outperform.

CONCLUSIONS

The insights afforded by behavioural economics are of great interest to policymakers and practitioners in financial services. An understanding of the implications of behavioural economics for elements of consumer behaviour may help in fashioning a choice architecture

that is more likely to bring the desired consumer responses. From a commercial perspective, the objective is to use the lessons provided by behavioural perspectives to enable companies to present choices in a manner that maximises take-up of products and services, encourages or engineers ongoing behavioural loyalty and thereby helps to cement relationships between firms and customers. From the policymakers' perspective, insights from behavioural economics may be used to encourage consumers to engage with financial services to a greater degree and to make increased levels of provision in areas such as pensions and other saving and, whilst doing so, to make ongoing investment decisions which are in the consumer's long term interests. This paper has provided an explanation of a number of aspects of behavioural economics and has supplied numerous examples of how these heuristics, biases and mental shortcuts may impact on financial services products and markets. In particular, the importance of loss aversion, the status quo bias and defaults and framing effects have been highlighted.

REFERENCES

- Benartzi, S. and Thaler, R. (1995). "Myopic Loss Aversion and the Equity Premium Puzzle". *Quarterly Journal of Economics*, 110(1), pp 73-92
- Benartzi, S and Thaler, R H (2001) "Naïve Diversification Strategies in Defined Contribution Savings Plans" *American Economic Review*, 91(1), pp 78-91
- Benartzi, S and Thaler, R H (2007) "Heuristics and Biases in Retirement Savings Behaviour" *Journal of Economic Perspectives*, 21(3), pp 81-104
- Benzion, U., Rapoport, A. and Yagil, J. (1989). "Discount Rates Inferred from Decisions: An Experimental Study". *Management Science*, 35 (3), 270-284.
- Brown, S., & Goetzman, W. (1995). "Performance persistence". *Journal of Finance*, 50, 679–698
- Camerer, C., Babcock, L., Loewenstein, G. and Thaler, R.H. (1997). "Labor supply of New York City Cab Drivers: One Day at a Time". *Quarterly Journal of Economics*, 112(2), pp 407-441
- Carhart, M. (1997). "On persistence in mutual fund performance". *Journal of Finance*, 52, 57–82
- de Meza, D, Irlenbusch, B and Reyniers, D (2008) "Financial Capability: A Behavioural Economics Perspective", Consumer Research 69, FSA, London;
- Diacon, S. and Hasseldine, J.(2007)., "Framing Effects and Risk Perception: The Effect of Prior Performance Presentation Format on Investment Fund Choice", *Journal of Economic Psychology*, 28 (1), 31-52.
- Dixon, M (2006) "*Rethinking Financial Capability: Lessons from Economic Psychology and Behavioural Finance*" Institute for Public Policy Research: Norwich Union, IRRR, London
- Fama, E. (1970). "Efficient capital markets: A review of theory and empirical work". *Journal of Finance*, 25, 383–416; Brown, S., & Goetzman, W. (1995). "Performance persistence". *Journal of Finance*, 50, 679–698
- Financial Services Authority (2007) "Treating Customers Fairly: Measuring Outcomes" Financial Services Authority, London, November 2007
- Financial Services Authority (2009) "FSA Factsheet: Improving Your Understanding of the Retail Distribution Review – Advisor Charging", FSA London.
- Financial Services Research Forum (2010) "The Trust Index: Q1 2010" Financial Services Research Forum/University of Nottingham, Nottingham
- Furche, A and Johnstone, D (2006) "Evidence of the Endowment Effect in Stock Market Order Placement" *Journal of Behavioral Finance*, 7(3), pp 145-154
- Goodman, A (2002), "Consumer Understanding of Risk: A Summary Report", Chairman of the Financial Consumer Support Committee, The Actuarial Profession, London.

Gross, D B and Soules, N S (2002) "Do Liquidity Constraints and Interest Rates Matter for Consumer Behaviour: Evidence from Credit Card Data, *Quarterly Journal of Economics*, 149-185

Johnson, E, Hershey J, Meszaros, J and Kunreuther, H (1993) "Framing, Probability Distortions and Insurance Decisions", *Journal of Risk and Uncertainty*, 7, pp 35-51

Kahneman, D. (2002). "Map of Bounded Rationality: A Perspective on Intuitive Judgment and Choice". *Nobel Prize Lecture*, 8th December 2002

Kahneman, D, Knetch, J L and Thaler, R H (1990) "Experimental Effects of the Endowment Effect and the Coase Theorem", *Journal of Political Economy*, 98, pp 1325-1348

Kahneman, D., J. Knetsch, R.H. Thaler. (1991). "Anomalies: The Endowment Effect, Loss Aversion, and the Status Quo Bias", *Journal of Economic Perspectives*, 5(1), pp 193-206

Kahneman, D. and Tversky, A. (1979). "Prospect Theory: An Analysis of Decision under Risk". *Econometrica*, 47(2), pp 263-291

Knetsch, J. (1989). "The Endowment Effect and Evidence of Nonreversible Indifference Curves". *American Economic Review*, 79(5), pp 1277-1284

Laibson, D. I. (1997). "Golden Eggs and Hyperbolic Discounting". *Quarterly Journal of Economics* 112 (2), 443-477

Lichtenstein, S. and Fischhoff, B. (1977). "Do those who know more also know more about how much they know?" *Organizational Behavior and Human Performance*, 20, 159-183

Loewenstein, G. and Thaler, R. (1989). "Anomalies: Intertemporal Choice". *Journal of Economic Perspectives*, 3 (4), 181-193.

Mahdon, D. and Paxton, W. (2004). "Consumer Understanding of Mortgage Risk and Use of Financial Information". Report produced for the Council of Mortgage Lenders. Exeter: University of Exeter.

McNeil, B., Sox, H. and Tversky, A. (1982). "On the Elicitation of Preferences for Alternative Therapies". *New England Journal of Medicine*, 360, 1259-1262

Mitchell, O., & Utkus, S. (2004). *Pensions design and structure: New lessons from behavioral Finance*. Oxford: Oxford University Press.

Mussweiler, T., & Schneller, K. (2003). "What goes up must come down – How charts influence decisions to buy and sell stocks". *Journal of Behavioral Finance*, 4, 121–130

Northcraft, G. B., and Neale, M. A. (1987). "Experts, amateurs, and real estate: An anchoring-and-adjustment perspective on property pricing decisions". *Organizational Behaviour and Human Decision Processes*, 39, 84–97

Mitchell, A (2010) "Behavioural Economics Will Shake Marketing to the Core" *Marketing Magazine*, 12 May 2010, pp 28-29

Office of Public Sector Information (2010) Statutory Instrument 2010 No 9, Pensions: The National Employment Savings Trust (Consequential Provisions) Order 2010, downloaded on 9/02/2010 at http://www.opsi.gov.uk/si/si2010/uksi_20100009_en_1

Pensions Commission (2004) "Pensions: Challenges and Choices: The First Report of the Pensions Commission", HMSO, London

Personal Accounts Development Authority (2009) "Building Personal Accounts: Designing an Investment Approach: A Discussion Paper to Support Consultation", May 2009, HMSO, London

Rhodes, M. (2000). "Past imperfect? The performance of UK equity managed funds". London: FSA, Occasional paper no. 9.

Samuelson, W and Zeckhauser, R (1988) "Status Quo Bias in Decision Making" *Journal of Risk and Uncertainty*, 1, 7-59

Schiff's Insurance Observer (2006) "Don't But Equity-Indexed Annuities" Schiff's Insurance Observer, 18(1) pg 1.

Slovic, P. (1987). "Perception of Risk". *Science*, 236, 280-285

Thaler, R. (1985). "Mental Accounting and Consumer Choice". *Marketing Science*, 4(3), 199-214

Thaler, R. (1999). "Mental Accounting Matters". *Journal of Behavioral Decision Making*, 12, 183-206

Thaler, R., & Benartzi, S. (1999). "Risk aversion or myopia? Choices in repeated gambles and retirement investments". *Management Science*, 45, 364–381

Thaler, R. and Sunstein, C. (2008). *Nudge: Improving Decisions About Health, Wealth and Happiness*, Yale University Press, New Haven and London

Tversky, A. and Kahneman, D. (1991). "Loss Aversion and Riskless Choice: A Reference Dependent Model, *Quarterly Journal of Economics*, 106(4), pp 1039-1061

Zaleskiewicz, T. (2006) "Behavioral Finance" (Chpt, 36) in Altman, M (Ed) "*Handbook of Contemporary Behavioral Economics: Foundations and Developments*", M E Sharpe, London/New York.