

# Qualitative Research in Financial Markets

## **What can behavioural finance teach us about finance?**

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## Abstract

**Purpose** – The paper draws on the key themes raised at a Round Table discussion on behavioural finance attended by academics and practitioners. The paper provides a background to the key aims of behavioural finance research and the development of the discipline over time. The purpose of this paper is to indicate some future research issues on behavioural finance that emanate from the financial crisis and highlight areas of mutual benefit to both behavioural finance academics and the finance industry so as to encourage a creative cross-fertilisation.

**Design/methodology/approach** – The paper draws on a Round Table discussion on behavioural finance that was organized by the Behavioural Finance Working Group, the Centre for the Study of Financial Innovation and Financial Services Knowledge Transfer Network.

**Findings** – The paper highlights numerous benefits that behavioural finance research can contribute to the financial industry, but at the same time there is an evident discrepancy between the academic and the professional world when it comes to utilising behavioural finance research.

**Practical implications** – The paper highlights several areas where behavioural finance can contribute significant benefits to a wide array of aspects of the finance industry.

**Social implications** – The paper seeks to inform behavioural finance issues so as to encourage collaboration between the academic world and finance practitioners. In so doing, the paper aims to encourage a greater awareness of individual decision-making frames and heuristics and how industry can apply these concepts to improve the allocation of finance products to society.

**Originality/value** – The paper brings together a wide array of finance professionals and academics to encourage greater collaboration and mutual respect of each others interest in and uses for behavioural finance.

**Keywords** Behavioural economics, Finance

**Paper type** Viewpoint

The authors would like to thank the Round Table Discussants at “What the behavioural sciences can teach us about the wholesale and retail financial markets” held in London, 11 December 2009 at Armourers’ Hall organised by the Centre for the Study of Financial Innovation and the BFWG and Financial Services Knowledge Transfer Network.

The aim of the Round Table was to bring together the academic and business world and introduce innovative and challenging research from behavioural finance to the financial industry. This paper draws on the key themes from the Round Table discussion.



The immediate impact of the financial crisis was that the old certainty that “the market knows best” seems to be cast in doubt. Both academics and practitioners need a new, or at least a partial, explanation of recent history especially if such theorisations might be harnessed in directing forthcoming financial market reforms or responding to their implementation. Skidelsky (2009, pp. 38-9) in commenting on the policy stance that oversaw the emergence of the crisis has three central insights:

[First] Markets are in general self-correcting, with market discipline a more effective tool than regulation, [. . .] [second] the main responsibility for managing market risks lies with senior management and the board of individual firms, [. . .] [and] [. . .] [finally] customer protection is best ensured not by regulation or direct intervention in markets, but by ensuring that wholesale markets are as unfettered as possible and transparent as possible.

These beliefs, whatever validity they may have had before the crisis, look somewhat naive after the crisis. In response to the crisis behavioural perspectives on finance have gained popularity as a means of understanding some of the causes of the crisis. As such, the behavioural approach is one stream of a broader questioning of standard models of financial decision making. But behavioural finance has a much longer gestation than its recent popularity suggests. We address some of this history and shed some light on what behavioural finance can teach us about finance.

### 1. What is behavioural finance and how do we make use of it?

Behavioural finance is a fully developed discipline that has its own theory base as well as methods and methodology; and ranging from ethnographic research to experiments. It was first developed in the early 1980s amongst a small group of academics from various fields, such as economics, psychology and engineering, led by a small core academic group organised out of the Russell Sage Foundation in New York. The original members are now leading researchers in behavioural finance and the working group is still going on with its second and third generation of academics. The behavioural finance discipline was born out of the lack of evidence to support extant finance theories on decision making and little theory that truly addressed many major facts concerning financial decision making. Their primary focus, therefore, was to uncover how decisions are made and how people really behave when they make financial decisions. In other words, behavioural aspects from psychology could be used to model financial decision making. We can understand the distinction between extant finance theories and behavioural finance through a simple example: if someone wishes to move to London, how does one approach making this decision? An economist would say that this person would maximize his expected utility and choose an apartment that is best for him. Behavioural finance would focus on the decision process: he would choose something close to the work place, with a car park and a necessary amount of bedrooms. Behavioural finance, therefore, contributes three major insights:

- (1) *Human intuition is fragile* – basic investment principles are not studied by everyone who makes investments. That is why, they are biased and fall in predictable patterns. This demands new theory a major spur to the Behavioural Finance Working Group (BFWG) itself.

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- (2) We have to consider decision processes if we want to know how decisions are made in finance. How did this choice come about? In this, financial choices are analogous to medical, consumer and structured other choices.
  - (3) People's personal beliefs are relevant in finance. Decision-making processes are already studied in medicine and the airline-industry in order to improve their procedures and quality of services. Traditional financial economics puts emphasis on the "homo-economicus" (fully rational reasoning) and it is important that we study decision making in finance because this rationality is not always the case in real life.

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Part of the contribution of the behavioural finance is to induce a Catholicism of methodological approach which standard finance often denies. So the behavioural perspective is often distinguished more by how it is done and not by what it studies. This Catholicism of research method is ideal for research problems requiring an interdisciplinary approach. Since much of the motivation for teaching finance in a business school context is to harness the benefits of interdisciplinary work, we might expect Finance academics working in business schools and their alumni to particularly value the behavioural approach.

## 2. How psychology has enriched finance

Behavioural finance is informed by three strands of psychology. First is cognitive or behavioural psychology, where the focus is upon how our minds undertake the requisite calculations required to maximise wealth. Much of the Nobel Prize Winning work of Daniel Kahneman (often in association with the late Amos Tversky) took this form. The second is emotional responses to the intensity of trading, where the focus is on decision-making being more than a strictly calculative process. The third is social psychology, which recognises the need to find acceptance and even encouragement of our acts. Certainly, rejection by our professional peers can be painful and potential costly in career terms. We may prefer to "fail conventionally" rather than expose ourselves to the social isolation non-conformity can bring.

This makes the adoption of a unified model hard and, perhaps, plain unhelpful. It is true quantification has a central role in good social science. But a higher value is the value of truth. The complexity of markets and social interaction more generally set strict limits on the predictive power of asset pricing models including behavioural alternatives. Behavioural finance studies how decisions are made by all kind of investors, from private individuals to professional investors and covers all spectrums of the financial arena (pensions, insurance, capital and money markets). It is an incredibly fertile research area and in spite of the extensive research on behavioural finance the discipline is not considered part of mainstream finance that one would find in a standard finance textbook. Yet, both business school courses and textbooks to service behavioural finance are now starting to appear.

Behavioural finance has a pragmatic aim – decision-making analysis. This means that it has closer proximity with the real world than some more mainstream finance approaches, such as the Chicago School of thought, where it is generally assumed that the world is fully optimal and efficient. We cannot go on assuming that the markets are fully rational and the people who think that the efficient market hypothesis is working are now becoming a minority.

### 3. The professional response to the growth of academic interest in behavioural finance

Finance theory, particularly at this time, is unusual in the degree to which it affects the lives of ordinary people. Theories of financial decision making, such as the efficient market hypothesis and the capital asset pricing model have had an impact on the way practitioners perceived the world around them. Financial innovations have driven the creation of whole markets, such as the development of portfolio insurance or the Gaussian copula formula for the pricing and hence managing of default risk in corporate credit instruments. Hence finance theory is “reflexive”, acting as both a camera to represent current reality and an engine to create a new transformed reality facilitated by the insights of finance theory (MacKenzie, 2006). This symbiosis especially marked in the area of “risk management” and the emergent belief that while risk could never be eliminated it could be effectively managed. It was this faith that was so brutally shattered during the financial crisis. For the emergent behavioural camp of finance scholars the effective arbitrage of the most clearly documented stock market “anomalies”, such as overreaction and post-earnings announcement drift has eroded their ability to show practitioners the monetary gain that derives from their labours.

The professional world is unclear whether a unique model of behavioural finance exists that is readily applicable to the financial industry. There is no straightforward answer to this issue. While behavioural models do exist, no single one offers answers to all of the questions. Models work in such a way that if you change slightly either the input data or the model assumptions, the results will change each time. That is why behavioural finance should not be looked into as a way of generating instant returns, but rather as a way of approaching or using the knowledge to understand decision-making processes. Just as in medicine, where there is not one drug for every disease so we should not expect that there will be one model that will fit all of the behavioural finance aspects. What is certain, however, is that all finance models that are used by practitioners need to be modified to capture various behavioural aspects. One practical example of applied behavioural finance comes from consumer debt-based financial instruments: the services they offer have been enhanced because they use behavioural finance techniques to understand more appropriately the psychology of the debtors.

Clear attractions with behavioural finance are its fertility in producing new theoretical and practical insights. Behavioural finance is disciplined in triangulation research methods. It is pragmatic and problem-based addressing practical problems that investment managers and boards of directors face. Furthermore, it is inspiring alternative ways of seeing financial decision making and, therefore, sharpening advice to clients. Studying decision making is important, because when faced with a vast number of choices people tend to avoid making one. The answer that behavioural finance offers is that by studying human decision-making behaviour we can “nudge” people into making their optimal choice. This discipline, therefore, creates a framework in which we can help people; that is why academics wish that professionals would pose issues that they want to be resolved.

One reason for embracing behavioural finance is that it articulates assumptions about how investors choose what they choose. We make these assumptions in standard models anyway by invoking the Von Neumann Morgenstern utility functions for calculating the value of uncertain outcomes. So the question is not whether we adopt of a psychology of human decision making, but rather whose psychology?

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Since psychology is now a well-developed part of medical science, or training aircraft pilots, a traditional division of labour suggests that we might learn from that discipline's lessons.

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#### **4. The financial crisis as a spur to interest in behavioural finance**

We cannot reflect on the crisis and say that there is nothing behavioural about it in the sense that so many of its origins makes us despair about the frailty of human judgement Alan Greenspan, stung by the criticism of his oversight of US monetary policy prior to the crisis neatly encapsulates this (<http://news.bbc.co.uk/1/hi/business/8244600.stm>):

They [financial crises] are all different, but they have one fundamental source, That is the unquenchable capability of human beings when confronted with long periods of prosperity to presume that it will continue.

The presence of leading contributors to the behavioural finance tradition, like Larry Summers and Cass Sunstein, both of whom are within President Obama's new administration, suggest that the behavioural finance tide will grow in policy circles. Since practitioners spend considerable time responding to, and innovating around, state intervention in financial markets and understanding of the behavioural tradition is likely to become more germane to professional lives.

If we are conscious of some of the behavioural issues emanating from the crisis, we can use behavioural aspects to help us reform regulation and partially anticipate problems ahead of time. It became apparent that in the pursuit for profits the imbedded regulations were not able to prevent CEOs from bending their financial reports in their favour. Mark to market accounting methods allowed assets to be written up on the back of the emerging speculative bubble in credit default swaps, and credit default obligations. Many financial actors were responding to incentives and looking for personal enrichment. So senior regulatory officials must see the bubbles in the making and prevent them in their inception instead of allowing them to flourish in the hope that the market will correct itself. This, of course, will be difficult in practice given politicians' focus on the electoral cycle and consequent lack of concern about even the medium term.

#### **5. Academics understanding of practitioners' concerns**

Practitioners being at the sharp end of understanding financial decisions may reasonably ask "What has behavioural finance ever done for us?" in short can behavioural finance specialists show us the money? The exact "value-added" of the behavioural approach remains unclear for some practitioners. The predictive value of behavioural theory is a primary concern to practitioners. Equally, the ability of the behavioural finance academic community to "market itself" to the practitioner community, if they wish to do so, remains a challenge. Of course, it is exactly this point where the reflexive nature of behavioural finance theory most clearly bites. It is the very success of trading strategies motivated by behavioural research, such as momentum and contrarian strategies, that has served to some degree to undermine their profitability. Hence behavioural theorists must innovate new strategies, and or refine old ones, to be of practical service to fund managers. Yet it is not clear that it is the trading of financial instruments where the primary contribution of behavioural insights lay.

It may be that behavioural finance has its most immediate primary value as a lens on financial regulation and as a way of debating its likely value. Hence those in compliance functions may be the first wave of those encountering, challenging and re-engineering financial regulation to address concerns about behavioural bias. As reformed poachers make the best gamekeepers an understanding of, and felicity with the approach, which informs regulatory reforms, may prove of value to practitioners. Less conspiratorially practitioners and regulators have shared concerns about the ability of retail investors to make decisions in their own best interest. Any financial provider with a clear customer focus will be concerned by damage arising from a failure to fully anticipate a clients' ability to effectively process the information that they are given when choosing between products.

Academic discussion concerning the problem of "self-control" suggests that there may be limits to the caveat emptor principle when the consumer's future self-resents the actions of his earlier incarnation in predictable ways. For example, Laibson (1997) has shown that future discount rates on consumption in the distant future are often far lower than those currently applied. This may explain underinvestment in pensions by the young. As a result, credit cards, which are often seen as an unambiguous blessing because they effectively increase consumer choice regarding their consumption/investment plan, may contain hidden downsides in a world of consumers lacking adequate self-control.

George Soros, the notorious Hedge-fund Manager, introduced the concept of "reflexivity" reminding us that our behaviour as investors, reflects theory's insights. So diversification of fund portfolios reflects the insights of William Sharpe, John Litner and others. Theory is an engine, not a camera, and chances the choice set investors face. Behavioural finance applications in fund management will change what is now profitable as observed trading flows respond to perceived arbitrage opportunities and mined out "anomalies" disappear.

A useful insight as to the practical application of behavioural finance was provided in the discussion from the consumer debt market. In buying consumer's defaulted debt at a discount the insights of behavioural finance can be beneficial in understanding how consumer's accumulate debt, why they default and how they may be motivated to try to resume repayment. This market is valued at £229 billion in the UK with many personal bankruptcies occurring each day. Cash-flow data are sparse and historic and future cash flows are highly unpredictable. As one discussant at the roundtable said: "understanding the history of defaulters convinces you that 'bad things happen to good people'". This helps in developing practical aids to debt recovery which avoids stigmatising defaulters, while offering them hope of renewed financial independence. It is therefore possible within the defaulter community to isolate groups that are most/least likely to repay their debts and assist accordingly.

A further example of human behaviour provided during the discussion was from the pension industry. This highlighted how most of us actually prefer to avoid conscious choices. Government policy in the pensions area is towards "stakeholder pensions" with reasonably sensible defaults being sensibly set and avoids a natural tension to retain excess earnings in cash-flow. "Nudging" consumers towards prudent decision making in their financial planning may be a less coercive way to help the ignorant or weak-willed from damaging their own lives and so seeking out social welfare payments. Part of understanding choice is to understand how disturbing it is and part of professional practice may be to avoid the tyranny of choice becoming too oppressive for clients.

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Clients are commonly asked their “attitude to risk” but on hearing their replies we may despair at their ability to understand the concepts involved. This casts doubt of the value of the “buyer beware” safeguards against mis-selling financial products.

Additionally, in relation to the on-gong financial crisis one clear problem practitioners encountered was better risk-management techniques (of VaR, Gaussian copula default probability calculations, etc.) which allowed bigger risks to now be assumed. The presence of “black-swans” and true uncertainty, or regime-shifts was downplayed, if not outright denied. Banks like ABN/AMRO were pressured to take bigger risks to match those of Goldman Sachs and other iconic market players.

It became apparent that presenting choices in different ways, or different orders, can influence choice. This had been observed in the selling of annuity products. Many clients clearly display at least two cognitive biases; first inflation illusion and a failure to understand how future inflation will erode the value of normal cash-flows and second, loss-aversion. Finance professionals need to embrace their role as “choice Architects” framing their clients decisions in a way that clearly represents the full consequences of their choice, graphical representations of likely outcome scenarios can be very helpful in this. Such insights have aided financial innovation to offer products that smooth out returns in the best and worst years. Clients often love returns less than they hate downside risk and are happy to enter risk-sharing contracts with financial product providers.

The impact on mental frames on investment choices has always been a primary driver of behavioural finance research. A central insight here has been the “integration” as opposed to “segregation” of elements of client’s losses. If a loss can be integrated into a broader gain it seems more palatable and less painful to endure. Strategic rearrangements of investors “mental accounts” can therefore be one way for sellers of investment products to extract consumer surpluses.

Another delegate explained how in the retail investor market clear evidence of information overload is present. While regulators have pressurised companies to make many disclosures it is not clear how well the average consumer of say an insurance product could use an undigested listing of such disclosures. So in signing up for products on the internet, we often simply tab down to “I accept the stated conditions” with little real understanding of what those conditions are. Retail investors, therefore, seem to satisfice, not maximise wealth, in their financial decisions. So there is a limit to disclosure as a remedy to poor decision making. This emphasises the need to be very careful in making sure the default choice is the most reasonable one for a broad class of clients. The general notion of “nudging” choice towards a sensible outcome is increasingly popular in policy groups surrounding politicians (Sunstein and Thaler, 2008) Such interventions are a form of “liberal paternalism” that guides the consumer without pre-empting his choice by taking “bad” ones off the menu he faces.

Financial products can be extremely complex today such that each professional understands their part of it (the option swap or the interest-rate collar) but understanding the whole impact on client wealth is not so easy. Confessing to ignorance at risk-management meetings may not be a great career strategy. This concern has been discussed in a growing literature on the “shrouded attributes” of retail investment products. Strategic representation of financial products to myopic, ill-informed consumers can undermine worthwhile investment planning. This opens up a possibility for product innovation to better address clients’ true needs albeit that these are often imperfectly articulated.

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## 6. Conclusions

The Round Table discussion highlighted numerous benefits that behavioural finance research can contribute to the financial industry, but at the same time there was an evident discrepancy between the academic and the professional world when it comes to utilising behavioural finance research. Academics wish to hear from industry about specific problems that need solutions whilst the professionals feel that academics should market themselves better and ask for research funding based on specific plans linked to industry needs. It will be highly useful to both worlds if this gap is abridged through stronger partnership and dialogue. The BFWG can act as this link and will through future meetings and conferences encourage these relationships.

## References

- Laibson, D. (1997), "Golden eggs and hyperpolic discounting", *Quarterly Journal of Economics*, Vol. 112, pp. 443-77.
- MacKenzie, D. (2006), *An Engine, not a Camera: How Financial Models Shape Markets*, MIT Press, Cambridge, MA.
- Skidelsky, R. (2009), *Keynes: The Return of the Master*, Allen Lane, London.
- Sunstein, C. and Thaler, R. (2008), *Nudge: Improving Decisions about Health Wealth and Happiness*, Yale University Press, New Haven, CT.

## Further reading

- Gabaix, X. and Laibson, D. (2006), "Shrouded attributes, consumer myopia and information suppression in competitive markets", *Quarterly Journal of Economics*, Vol. 121 No. 2, pp. 505-40.

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