



What behavioural finance can teach us about wholesale and retail finance markets

Friday December 11th 2009 at Armourer's Hall

A round-table discussion with Gulnur Muradoglu (Cass Business School), Werner De Bondt (DePaul University), William Forbes (Loughborough University Business School), Jose Manuel Varas (Cabot Financial) and Christopher Clack (UCL).

This well-attended event brought together the academic and business world to discuss current academic work in the behavioural sciences that may help us to understand (and predict) how actors operate in both wholesale and retail finance. It provided a broad-brush *tour d'horizon* to explore what academics and the City can offer one another.

The discussion began with the fundamental question: **“what is behavioural finance and how do we make use of it?”**

What is Behavioural Finance?

Professor De Bondt defined Behavioural Finance as *“The study of financial decision-making”*

Behavioural finance is a fully developed discipline that has its own theory base as well as methods and methodology, ethnographic research, data, and experiments. It was first developed in the early 1980s among a small group of academics from various fields like economics, psychology and engineering. 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 frustration with a lack of evidence to support extant theories on financial decision-making and the fact that few theories addressed observed behaviour. Their primary focus at the time was to uncover how decisions are made and how people really behave when they make financial decisions. We can understand this much better through a simple example: if someone wishes to move to London, how would he or she choose an apartment? An economist would say that this person would choose the apartment that “maximized his or her expected utility”. Behavioural finance would instead focus on the details of the decision process: s/he would choose something close to the work place, with a car park and a necessary number of bedrooms. Through this way of analysis behavioural finance offers three major insights:

1. Human intuition is fragile – basic investment principles aren't studied by everyone who makes investments. That's why they're biased and fall in predictable patterns.
2. We have to consider decision *processes* if we want to know how decisions are made in finance.
3. People's personal beliefs are relevant in finance. Decision making processes are already studied in medicine and the air-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 isn't always the case in real life.



Professor Forbes described the problem of human self-control, and how (lack of) self-control contributes to financial decision-making. Behavioural finance is a fascinating field that studies how decisions are made by all kind of investors, from individuals to money managers, and covers all aspects of finance including pensions, insurance capital and money markets. This is an incredibly fertile area where much research has already been carried out and yet the discipline is not considered part of mainstream “business school textbook” finance. Behavioural finance has a pragmatic aim - decision making analysis. It is closer to the real world than some mainstream finance approaches, such as the Chicago school of thought where it is generally assumed that the world is fully optimal and efficient. It is now widely accepted that we cannot assume the markets are fully rational, and those people who believe in the strong Efficient Market Hypothesis are becoming a minority.

How do we make use of it?

Jose Manuel Varas described how Cabot Financial have modified their mathematical models to encompass behavioural aspects, and how they have used this to create new products in the area of tailored debt. They have focused on issues such as: why do people take credit? why do they default on credit? and why do some engage in multiple defaults? Interesting questions that have surfaced include whether defaulters always accept that they have defaulted, and to what extent default is more often caused by over-optimism than by intent or incompetence?

This market is worth £299bn in the UK with hundreds of personal consumer debts and personal bankruptcies every day. Where cash-flow data is sparse, and perhaps historic data is not representative of future cash-flow, understanding the history of defaulters can lead to a growing acceptance of the fact that “bad things happen to good people” and this can help both in planning and in response to defaults. For example, to help develop practical aids to debt recovery that avoid stigmatising defaulters, while offering them hope of renewed financial independence. Within the defaulter community it is possible to isolate groups that are most/least likely to repay their debts.

A second example of industry application was discussed in the area of influencing purchasing decisions. Experiments have demonstrated that when purchasers are given too much choice they often make no decision (even if *ab initio* they want to buy); therefore, via choice limitation and/or selective disclosure and ordering of choices it is possible to help purchasers to make appropriate buy decisions (to nudge them into making their optimal choice). Professor Forbes explained how different cognitive issues are involved in such behaviour – such as dual processing, mental frames, decision shortcuts and self-control.

Part of understanding choice is to understand how disturbing it can be to have to make a choice – especially from a large number of options – and part of professional practice may be to avoid the tyranny of choice becoming too oppressive for clients.

Many clients display at least two cognitive biases: first, a failure to understand how future inflation will erode the value of normal cash-flow; and second, an aversion to loss. Finance professionals need to embrace their role as “choice architects”, framing their clients’



decisions in a way that makes most clear the full consequences of their choice (graphical representations of likely outcomes can be very helpful in this). Retail clients often love returns less than they hate downside risk and are happy to enter risk-sharing contracts with financial product providers.

Knowledge Capture / Knowledge Transfer

So how can academic expertise in the area of behavioural finance be captured and transferred into industry? Christopher Clack asked whether the academic knowledge had yet been systematised so that this expertise could be captured and easily conveyed to (exploited by) industry?

This question proved difficult to answer. Any easier question was “is there a single model of behavioural finance?”. William Forbes explained that while behavioural models do exist (e.g. hyperbolic discounting), no single model offers answers to all questions about behavioural aspects. These models work in such a way that slight alterations in either the input data or the model assumptions give different results. Behavioural finance should be seen as a way of approaching or using knowledge rather than a method that can be mechanistically applied for instant profit. An analogy was drawn with medicine; just as there isn’t one drug for every disease, there isn’t one model that will fit all of the behavioural finance scope.

Christopher Clack explained that, from a technological perspective, the absence of a unified model presents no problem (since rules – hard or soft - can be used to select from a taxonomy of models); nor does the observation that humans often maintain multiple mental frames simultaneously (since humans are easily modelled as collections of competing and co-operating urges). This is all grist to the mill of computational simulation, as demonstrated in “Systems Biology” simulations of the highly complex, non-deterministic and multi-functional behaviour of biological organisms. An open question is whether the ability to express behavioural finance concepts in such a process-oriented way might help industry to understand better how behavioural finance concepts and frameworks can be applied in practice.

What is the most obvious and immediate application area?

A common view is that the 2008 financial crisis involved substantial behavioural aspects that were not subject to regulatory control and led to an increase in systemic risk, such that the market lost the ability for self-correction. An understanding of behavioural aspects could therefore be used to help frame better working practices and better regulations to prevent re-occurrence. However, we must also understand the behaviour of regulators and government – for example, just as traders are motivated by incentives and looking for personal enrichment, government is motivated by the electoral cycle and short-term prosperity at the expense of medium- and long-term stability. An understanding of behaviour at all levels may help regulators to prevent bubbles at their inception rather than allowing them to flourish in the hope that the market will correct itself.

Conclusion



The round table highlighted the need for more dialogue between Academia and Industry. It is clear that financial services professionals are intrigued by the possibilities offered by behavioural finance, and academics are keen for professionals to pose issues to be resolved. This round-table event has only scratched the surface of what is possible, and many in the room were left with a desire for more detailed information – to understand exactly how the academic expertise could be used in practice.

Next steps

1. It is proposed that a follow-on event should be organised to focus on the application of Behavioural Finance to just one or two specific industry problems.
2. The Economic and Social Research Council (ESRC) is a major funding body for academic research in this area and has expressed a keen desire to fund industry-academia collaborative research in this area. The Financial Services KTN is tasked with helping to bring together potential partnerships for such funding – anyone (from academia or industry) interested in such collaboration should contact Christopher Clack at <chris.clack@fs-net.org>