

# Behavioural finance and the corporate treasurer

Getting to grips with behavioural finance techniques can greatly enhance decision making processes, says Richard Taffler of the Cranfield School of Management.

Recent dramatic events in the stock markets worldwide only serve to reinforce Federal Reserve chairman Alan Greenspan's use of the term 'irrational exuberance' to describe the behaviour of investors in December 1996. This warning, which has become a catch phrase, struck a cord. There is a growing realisation that the theory of market efficiency beloved by financial theorists may be more complex than originally believed and, importantly, that people do not necessarily act 'rationally' as economists argue they should.

Market professionals and corporate financiers are now beginning to recognise that we need to learn from the psychologists about how we make judgements. By recognising that we are human, as opposed to *homo economicus*, and thus fallible and prone to bias, we can significantly improve our decision-making.

## What is behavioural finance?

Behavioural finance is a new discipline that seeks to apply the insights of the psychologists to the financial behaviour of market participants and financial decision-makers more generally. It is very practical in its purpose. By recognising our own decision errors and the biases to which we are prone in our judgements, and understanding the reasons for these, we are in a better position to avoid future mistakes. Similarly, we ignore the decision errors of others at our peril.

## What issues does behavioural finance seek to address?

Behavioural finance research is developing rapidly and is now beginning to address such questions as:

- why is stock price volatility so high and prices subject to 'bubbles' as in dotcom mania;

- why is the volume of trading in financial markets so excessive;
- why is the premium on equity returns to bonds too high to be explained by risk alone;
- why are investment analysts unable to identify under- and over-valued stocks;
- why is it not possible to predict the future direction of capital markets;
- why do investors sell winners too soon and hold on to losers too long and confuse 'good companies' for good investments;
- why are acquisitions on average 'bad news';
- why do corporate managers find it so difficult to terminate loss making projects; and
- why should IPOs exhibit short run stockmarket out-performance and then long run under-performance?

## What types of fallible behaviour do we exhibit?

Psychologists teach us that because of our cognitive limitations all of us, however professionally well qualified or experienced, are prone to a number of key biases in our judgements. We are also frequently forced to resort to the use of heuristics, trial and error, back-of-the-envelope rules of thumb, which



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we use to simplify our complex judgement or decision tasks. However, such simplification strategies often lead to adverse consequences for the judgements we make.

What are some of these biases we are pre-disposed to?

## Availability heuristic

To start with we are prone to what is known as 'availability heuristic'. We believe that the probability of an event occurring depends on how easily it can be brought to mind or imagined. The more vivid and salient the more likely the outcome is to occur. An associated aspect is illusory correlation which describes how we see what we want to see and interpret evidence in terms of preconceived notions. The operation of this bias would go some way towards explaining the prevalence of chartism or technical analysis in the capital markets, where practitioners read apparent patterns into what are random sequences of price or market movements.

## Representativeness heuristic

We are also prone to make judgements based on stereotypes rather than the underlying characteristics. This is known as the 'representativeness heuristic'. Consider the following: Peter is a street-wise extrovert who talks quickly and wears smart clothes. Young, bright and dynamic, he has a slight East London accent. What is the probability that Peter is a derivatives trader?

What probability did you estimate? Typical answers are well over 50%, even though probably a maximum of 1% of investment bankers actually trade derivatives. This is an illustration of how the representativeness of the situation distorts our judgement so that we forget the underlying factors at work.

Other consequences of this heuristic are that we tend to draw conclusions on the basis of very little information. We

expect extreme market performance to be followed by similar extremes, ignoring the tendency for regression towards the mean. We are also liable to the illusion of validity, where our confidence in our judgements is a function of the representativeness of the situation, not the underlying decision characteristics, as in our continuing reliance on the selection interview despite its notorious lack of predictive ability. Another important illustration is how investors and financial journalists are prone to the 'good company, bad stock' syndrome. Here, analysts believe well known and widely admired companies are good stock-market investments. But, in practice, the two turn out to be unrelated.

**Anchoring and adjustment heuristic**

Another bias, known as the 'anchoring and adjustment heuristic', is when making assessments decision-makers anchor on an initial value and then adjust this up or down accordingly. The traditional budgeting process is a good example of this, where current figures are used to anchor the budget for the following year.

Investment analysts use a similar process in making earnings forecasts, and in stock valuations by anchoring on the current price/earnings ratio (P/E) and then adjusting this up or down to arrive at a prospective P/E to identify potentially over- or under-valued equities. The operation of this bias also accentuates our inherent conservatism leading to under reaction to new information and working with overly narrow confidence intervals. Note the surprise of forecasters after the outcome is known.

**Frame dependence**

This is another important bias. Here, our actual judgements depend not only on the underlying information we are given, but also on the way in which this is presented to us. Posing the same problem in different ways or reframing will lead to apparent changes in it and consequently different decisions.

**Loss-aversion**

An expected loss typically has about two-and-a-half times the impact on us as gain of the same magnitude. This is a crucial bias with major ramifications in all of our decision-making. The psychological reasons for the power of this bias are that such a loss is associated

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not just with regret and shame but also the feeling of responsibility and associated blame, all of which we inevitably seek to avoid.

For example, loss aversion leads to our inability to close down loss-makers and to over-pay for acquisition. Similarly, in the personal investment area, we tend to sell winning stocks too soon, thereby avoiding the potential regret associated with any potential subsequent price fall, and holding on to losers too long. The latter is known colloquially as the 'get evenitis' disease by professional traders. We find it difficult to close a position at a loss and hope that if we hold on long enough the stock will return to the price at which we bought it. We can overcome the operation of loss aversion to some extent by the use of rules to enforce self-control. For example, market traders who recognise this bias have explicit rules to sell after 5%, 10%, or 15% price decline.

**Hindsight bias**

Most people are vulnerable to the 'I knew it all along' effect or hindsight bias. Once an event has happened we believe it was inevitable in hindsight. This bias, as with many others, is highly resistant to correction through learning, since making sense out of what one is told about the past seems so natural and effortless.

We tend to override previously stored memories in our brain so making it difficult to reconstruct past experiences. Once we know interest rates have gone down we believe this was inevitable, and bankers can honestly believe they are rarely caught unaware by customer failures once these have taken place. Also, on this basis past decisions may look wrong, whereas they were perfectly reasonable given the information set available at the time.

**Attribution bias**

We are similarly prone to attribution bias. Here we attribute successful decisions to skill and unsuccessful outcomes to bad luck or outside events. This bias is frequently manifest in chairmen's statements and by investment analysts in explaining the subsequent market performance of their stock recommendations. Another good example is the manner in which internet stock traders are currently blaming the market and their internet trading sites for their losses rather than their own judgement.

**Over-confidence**

Another important behavioural pattern is over-confidence in our abilities. We systematically overestimate what we can do compared with what objective circumstances would warrant. The more difficult the decision task and the more complex it is, the more successful we expect ourselves to be. Similarly, the more time and effort we put into making a decision, the more control we feel we have over the outcome and thus the more confident we are in its success, illustrative of the operation of illusion of control. Often, however, actual performance has little or no relationship with confidence. Associated with illusion of control is over-optimism. People are generally predisposed to be excessively optimistic about the likelihood of particular outcomes. The operation of this set of judgemental biases is clearly at work in explaining the beliefs of fund managers and investment analysts in their superior investment abilities and the poor outcomes of many takeovers.

**Where does it impact in practice?**

Recognising that such cognitive biases are an integral part of our day-to-day financial decision-making is half the battle. Examples in the work we do are legion. We typically believe the stock-market under prices our company which follows because boards suffer from over-confidence and illusion of control. Takeovers are another important issue with shareholders of the acquirer often losing out and acquisitions often followed by divestment.

If bidders overpay, this may well be a function of our accepted beliefs in our own ability to generate a return from the acquired business better than its existing managers, an illustration of over-optimism and hubris. Similarly, in a bidding competition, we don't want to lose, loss

aversion takes over and the desire to avoid regret.

When dealing with loss-makers and unsuccessful operations, traditional capital budgeting argues that projects should be terminated where the expected net present value is less than zero. However, in practice, managers become entrapped into losing projects and tend to throw good money after bad in an attempt to rescue them, parallel with the investors' inability to sell losing stocks discussed above. The more directly associated we are with the failing activity, the more reluctant we are to terminate it. Inevitably, we procrastinate when confronted with realising the loss in the hope things will turn out alright in the end, and to postpone the pain and regret resulting.

As such, we need to institute 'self-control rules' to enforce loss realisation in the form of, for example, periodic project NPV reviews enforced externally to the project manager.

Also, we need to look at ways of reframing losses as gains, for instance, failing projects having redeeming features such as leading to a greater understanding of customer, technology, markets and the like.

Interestingly, the board itself often becomes entrapped with a failing strategy or project such as an unwise acquisition or a turnaround strategy that is not working. Examples are manifest in the financial pages every day. Often the only way to deal with such loss-making activities is to introduce new managers with no ties to the current project, as in the case of BMW's decision to divest itself of Rover, its stock rising by 10% in the month of announcement.

Another implication is that we need to recognise that our trading performance is on average not going to be any better than that of the market as a whole, which we will be unable to outguess. As Benjamin Graham, the investment guru, points out: "The investor's chief problem – and even his worst enemy – is likely to be himself."

Research into the actual behaviour of stockmarket investors demonstrates we trade much too often, incurring excess costs, sell winners too soon and hold on to losers too long and suffer from unwarranted over-confidence and illusion of control.

Although it is not possible to beat the market on any consistent basis, the operation of the cognitive biases to

which we are prone makes us believe we can, and also be psychologically resistant to acknowledging that, fundamentally, markets are efficient.

Although there is little parallel research so far into trading behaviour in foreign exchange, interest rate futures and derivatives, there is no reason to believe traders in these markets are not subject to exactly the same biases with the same potentially expensive adverse consequences.

#### What does this mean for treasurers?

Basically, we need to be aware of the psychological biases at work in our decision-making and as a result be rather less confident in their outcomes. On the other hand, it would be wrong to throw out all of finance theory which still provides a reasonable approximation of what happens in practice. To do this would be an illustration of the representativeness heuristic at work. However, by exploiting our understanding of human behaviour we are going to be in a better position potentially to gain competitive advantage and, probably more importantly, avoid one or two decisions that may otherwise have gone expensively wrong. ■

*Richard Taffler is Professor of Accounting and Finance at Cranfield School of Management.*

[www.cranfield.ac.uk/som/finance](http://www.cranfield.ac.uk/som/finance)

Professor Richard Taffler will be talking about the implications of behavioural finance for the work of treasurers and financial directors on the joint Cranfield School of Management/Association of Corporate Treasurers 'Senior Treasury and Financial Markets Seminar' on 24-25 May and 1-2 November this year. For further information contact Lisa Chapillon, Client co-ordinator on 01234 754506 or email her at [lisa.chapillon@cranfield.ac.uk](mailto:lisa.chapillon@cranfield.ac.uk).  
Quote ref: SAB159

For further reading see *Beyond Greed and Fear; Understanding Behavioural Finance and the Psychology of Investors*, Hirsh Shefrin, Harvard Business School Press, 2000, ISBN 87584872-9, £23.99.

David Mulligan

Group Financial Controller

MORGAN SINDALL PLC



Age: 31

#### Education & Qualifications:

Rickmansworth School, Hertfordshire

1988 Emmanuel College,  
Cambridge, BA Hons in  
Geography

1995 ACA

2001 AMCT

#### Career history:

Chartered Accountant, then  
Consultant

Ernst & Young  
Assistant Divisional Financial  
Controller

Smiths Group plc

Group Finance Manager

Morgan Sindall Plc

Group Financial Controller

Morgan Sindall Plc

1991

1996

1997

1998

After several years with Ernst and Young, firstly in audit, then in the consultancy practice, I decided to broaden my experience with a move into industry at Smiths Group plc. I then joined Morgan Sindall plc, a fast growing top 10 UK construction group, and was promoted to my current role the following year.

My responsibilities as Group Financial Controller are broad and cover management and financial reporting as well as treasury and tax. The group has grown at around 30% per annum for the last five years and has become increasingly more sophisticated in its approach to cash management. The group's businesses are cash generative so our main treasury activities are focused on day-to-day money market deposits.

I embarked on the AMCT exams last year with some trepidation after five years without any formal studying. The qualification has been very useful and has helped me in gaining a better understanding of cash management. It has also given me a good introduction to matters that are likely to arise as the group continues to grow. ■