

BEHAVIOURAL FINANCE- A REVIEW

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ABSTRACT

This paper briefly presents a review of the main ideas and concepts in behavioural finance. Behavioural finance is primarily an integration of economics and broader social sciences like psychology, sociology, anthropology. This young but evolving field drops the customary assumption of rationality driven investors and incorporates the humanness and various psychological biases into model building.

Keywords: Behavioural Finance, Economics, Psychology, Rationality

INTRODUCTION

The science of economics deals with the way market participants (investors, producers, consumers) behave while making decisions regarding investment, consumption, and production etc. The traditional economic framework assumes these economic agents to behave rationally and incorporate all available information in the decision making process. In contrast, there is a considerable research which reveals a great deal of deviation from the assumption of economic rationality. The advent of behavioural finance, as an offshoot of behavioural economics, has recast a new light on the way markets and economic agents behave by dropping the assumption of rationality and incorporating the very genuine understanding as economic agents behaving “irrationally under uncertainty”. Behavioural finance conceptualises people as being overconfident, limited in their self-interest, will power and calculating ability.

“Behavioural Finance- that is finance from a broader social science perspective including psychology and sociology” Shiller, 2003. “Behavioural finance is simply a moderate, agnostic approach to studying financial markets” Thaler, 1992. “I think of behavioural finance as open- minded finance” Thaler, 1992. “Behavioural economics (Finance) is the combination of psychology and economics that investigates what happens in markets in which some agents display human limitations and complication” Mullainathan and Thaler , 2000. “Behavioural finance is the integration of classical economics and finance with psychology and decision making sciences” Fuller, 1998. The common thread in all these definitions is that it is the marriage between economics and psychology.

Behavioural finance drops the assumption of rationality by allowing for observable, systematic, and very human departures from rationality into standard models of financial markets (Barber and Odean, 1999). The incorporation of human weaknesses and cognitive infirmities in economic behaviour can explain many unresolved problems in economics and

finance. Behavioural has two building blocks : market inefficiency (limits to arbitrage) and cognitive psychology. Cognitive refers to how people think. There is a huge psychology literature available revealing that people make systematic errors in the way that they think like overconfidence, representativeness, putting too much weight on recent experience, anchoring etc. The field of behavioural finance uses this body of knowledge in building models which closely and efficiently explains the markets and economic agents. Limits to arbitrage refer to predicting in what circumstances arbitrage forces will be effective and when they won't be. Behavioural finance uses models in which some agents are not fully rational, either because of preferences or mistaken beliefs (Jay R. Ritter, 2003). An example of preference based assumption is that people are loss averse a \$ 10 gain may make one feel as much better by as much as a \$ 5 loss makes one feel worse. The Efficient Market Hypothesis (EMH) is the building block of modern finance (Fama, 1970, 1991). The EMH argues that the competition between investors seeking abnormal profits drives prices to their "Fair value". The efficient market theory reached its pinnacle academic dominance around 1970s (Shiller 2003). Lintner(1965) and Black (1972) developed statistically testable capital asset pricing model (CAPM). CAPM describes that with competitive market, symmetric information and no frictions, the only variation in return across assets are due to differences in risk.

Limits to Arbitrage

The behavioural economists argue that the arbitrage can be limited due to the fundamental risk, implementation cost and model risk. Shleifer and Vishny (1997) argue that arbitrage may be restricted because it is costly precisely when it would be useful in removing pricing inefficiencies. For example, because of marking-to-market, arbitrageurs may require more and more capital as prices diverge more and more from their efficient values. Furthermore, Daniel *et al.* (2001) argue that owing to risk aversion, arbitrageurs may not be able to remove all systematic mispricing. Economists argue that the behavioural biases and deviations from rationality are not considerable as the people who frequently make mistakes will learn out of their mistakes and the biases will disappear in the long run. However, learning can minimise the mistakes but it cannot eliminate it all together, (Barberis and Thaler , 2003).

Psychological Biases

Overconfidence: There is a considerable evidence substantiating the proposition that people are unduly optimistic about their abilities and while making judgements (Odean, 1998). People manifest their overconfidence in a number of ways. One example is *,too little diversification*, it is the tendency of the people to invest a large amount of money in what is one familiar with. As a result, people invest in fundamentally lousy local companies even though this is bad from a diversification point of view. Barber and Odean (2001) found that the more people traded, the worse they did, on average men traded more, and did worse than women investors. This is primarily because of the fact that men are more overconfident than the women.

Framing: Framing refers to the way a problem is posed for the decision maker. In many actual choice contexts the decision maker also has flexibility in how to think about the problem. For example, restaurants may advertise "early-bird" specials or "after-gym" discounts but they never use Peak-period "surcharges."

Heuristics: Rules of thumb make decision making easier. However, they can sometimes lead to biases. The latter results into sub-optimal investment decisions. Benartzi and Thaler (2001) have documented that many people follow the 1/N rule.

Representativeness: People tend to put too much weight on recent experience. Representativeness can also arise in the guise of the ‘law of small numbers’ whereby investors tend to assume small sample represents the properties of population. This error leads to investors picking hot stocks and to avoid stocks which have poorly performed in the recent past. This phenomenon could provide explanation for investor overreaction (De Bondt and Thaler, 1985) Kahneman and Tversky (1974) show that when people try to determine the probability that a data set A was generated by a model B, or that an object A belongs to a class B, they often use the representativeness heuristic. To illustrate, Kahneman and Tversky present this description of a person named Linda: Linda is 31 years old, single, outspoken, and very bright. She majored in philosophy. As a student, she was deeply concerned with issues of discrimination and social justice, and also participated in anti-nuclear demonstrations.

When asked which of “Linda is a bank teller” (statement A) and “Linda is a bank teller and is active in the feminist movement” (statement B) is more likely, subjects typically assign greater probability to B. This is, of course, impossible. Representativeness provides a simple explanation.

Mental Accounting: The process of formulation of problems or actions with probabilities of different outcomes is called mental accounting. Individuals allocate wealth to separate mental compartments and ignore fungibility and correlation effects. One important feature of mental accounting is *narrow framing*, which is the tendency to treat individuals gambles separately from other portions of wealth.

Self –Attribution Bias: When people attribute successful outcomes to their of skill and sound judgement and blame external causes for unsuccessful outcomes rather than on their own ineptitude, they in fact indulge in self-attribution bias. For example, investors might become overconfident after several quarters of investing success (Gervais and Odean, 2001).

Anchoring: When things change, people tend to be slow to pick up on the changes. In other words, people ‘anchor’ too much on the initial or previous value (Barberis and Thaler, 2003). This can result into the investor believing that the stock to trade in a defined range.

Disposition effect: Shefrin and Statman (1985) found that investors are reluctant to sell assets trading at a loss relative to the price at which they purchased, a phenomenon labelled the “disposition effect”. Odean (1998) finds that the individual investors in his sample are more likely to sell stocks which have gone up in value relative to their purchase price, rather than stocks which have gone down. Grinblatt and Han (2001) argue that the investor behavior inherent in the disposition effect may be behind a puzzling feature of the cross-section of average returns, namely momentum in stock returns.

Applications of Behavioural Finance

Below is a brief outline of the applications of behavioural finance:

Lee, Shleifer and Thaler (1991) argue that a considerable number of investors who are the primary owners are noise (irrational) traders, exhibiting irrational swings in their

expectations about future fund returns. This behaviour of stock traders influences share prices and also the difference between the share price and net asset value (NAV).

Benartzi and Thaler (1995) argue that the return on equities being over the riskless rate can be explained by myopic loss aversion.

Odean (1999) the explanation for excessive trading in stock markets is overconfidence. People unwittingly invest in stocks pretending to have access to complete information, when that is not the case.

Hong and Stein (1999) model the phenomenon of under reaction and overreaction by assuming the market is composed of heterogeneous investors. The model predicts that stock prices will under react to information in short to medium run, but will overreact in the long run.

Taffler, Lu, and Kausar (2004) document market under reaction to the bad news contained in going-concern-modified audit reports.

Baker and Wurgler (2004) argue that dividend policy may be influenced by managers “catering” to the demands of investors. According to the authors, managers rationally cater to investor demand by paying dividends when investors put higher prices on payers and not paying when investors prefer nonpayers.

Grinblatt and Han (2005) argue that prospect theory, and the resulting tendency of investors to hold losing positions and sell winners, explains the momentum effect.

Hong, Kubik, and Stein (2005) find that mutual fund managers herd in terms of the stocks that they buy or sell during a particular quarter.

Huberman and Jiang (2006) using a larger and more appropriate dataset, find evidence instead for a conditional $1/n$ approach in which investors choose three or four funds from the range offered and then allocate equally among them. In this case, fund range has less influence on asset allocation.

Oberlechner (2007) provides an extensive review of psychology research relevant to ethical decision making in the finance and investment industries. He notes that ethics goes beyond restraining from unethical behavior because of the potential costs of exposure.

Prentice (2007) provides another broad review of ethical decision making in a financial context. He argues that well-intentioned people can have ethical lapses if they find themselves in particular circumstances and do not take account of the errors in judgment that humans are behaviourally inclined to make.

CONCLUSION

Behavioural finance has made remarkable breakthroughs in various areas of finance. The idea that markets are not always efficient and investors sometimes behave irrationally have been greatly researched and found to be true by behavioural finance practitioners. We must give credit where it is due, it can be easily said that we have come a long way in gaining a prompt and comprehensive understanding of how in reality the inventors behave while making various decisions. BF has come under a sever attack by some intellectuals like

Rubinstein (2001) calls it a “litany of explanations drawn from burgeoning, clearly undisciplined and unparsimonious behavioural finance literature.”

Thaler (1999) writes, “ I predict that in too distant future, the term “ behavioural finance” will be correctly viewed as redundant phrase. What kind of finance is there? In their enlightenment, economists will routinely incorporate as behaviour into their models as they observe in real world. After all, to do otherwise, would be irrational.”

Behavioural finance is a young field but we know a great bit about the investor behaviour, their preferences, beliefs, limits to arbitrage, bounded rationality, neuroeconomics, about the dangers of forecasting etc. still a lot will be coming in future about this evolving subject of behavioural finance.

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