



# EVOLUTION OF BEHAVIOURAL FINANCE

1. Dr. C. S. Joshi, 2. Sneha Badola

1. Professor and Head of Commerce Department, 2. Research scholar

Department of Commerce

M.B Govt. P.G. College, Haldwani, Uttarakhand.

## Abstract:

This article provides an introduction to origin and evolution of behavioural finance, a brief history of this new unconventional form of finance and the theories related to it.

**Key-words: Behaviour, behavioural, finance, theories, unconventional.**

“Behavioural finance is the study of the influence of psychology on the behaviour of financial practitioners and the subsequent effect on markets.”

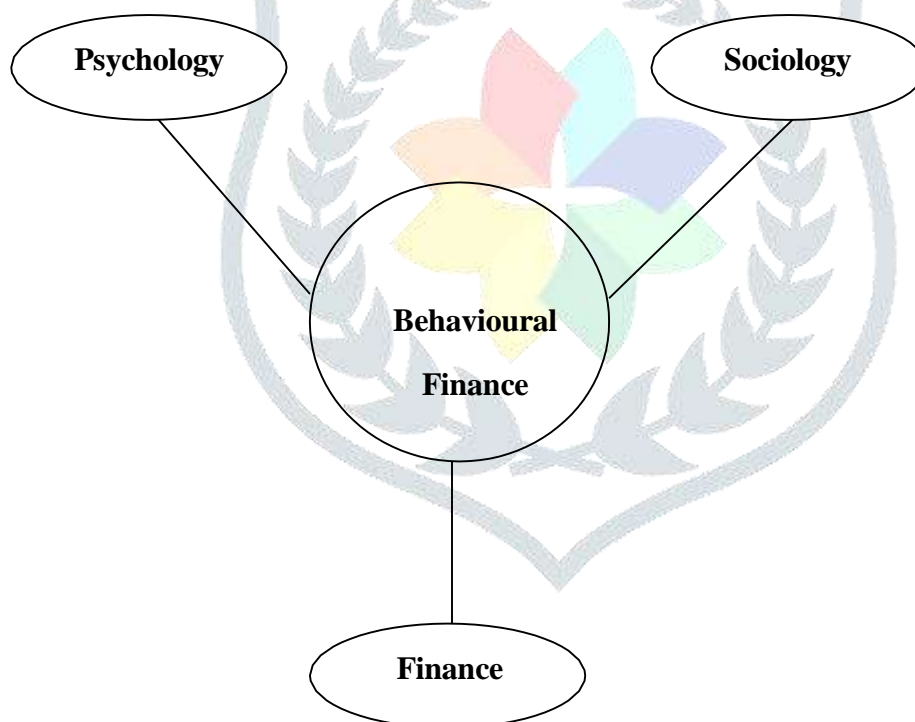
– Martin Sewell

In the early 1980s, the behavioural finance was first acknowledged by academician from disciplines, for instance, psychology, economics and engineering, headed by a tiny group of academicians organized from the Russell Sage Foundation in New York. The chief member of this group is now a renowned researcher in behavioural finance. The origin of behavioural finance was emerged due to absence of supported theories on decision making (Goyal & Kumar, 2021) in the financial field. In rational and modern finance, all the concepts, theories and models suppose investor and agent are rational and the stock market is efficient (Nigam et. al. 2018).

Atta & Marzuki (2021) has appropriately stated behavioural finance as being “a rapidly growing area that deals with the influence of psychology on the behaviour of financial practitioners”. Literature relates the behavioural finance with the psychology of investors and agents that have an important role in supervision and execution of financial matters. It is a fact that humans have sentiments that guide their decision-making process. As such decisions influenced by emotions which inclined to irrational and inefficient and cause anomalies in the financial market. As standard finance had failed to correctly understand the behaviour of the stock market in the bubble and recession phenomenon, therefore, some of the researchers documented that

behavioural finance is more powerful and reasonable to explain this phenomenon (**Hon et. al., 2021; Bird et. al., 2017**). **Sharma & Kumar (2019)** stated that “behavioural finance framework is relatively naïve and is not matured enough (in terms of empirical and theoretical research) to be accepted as an alternative theory in market contexts to EMH”.

Most famous researchers of behavioural finance, **De Bondt et. al., (2010)** stated that “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”. Many economists defined behavioural finance as a sub-theme of behavioural economics in which integrated outcomes from “psychology” and “sociology” take the shape of its models and theories (**Schindler, 2007**). Behavioural finance is a mixture of theories of finance, psychology, and sociology (see Figure 1.1). It is behavioural finance models which explain people sentiments and market abnormalities. Following sections discuss the theories and models of behavioural finance. The theory of “bounded rationality” was propounded by Simon (1955) more than sixty-five years ago. Besides, **Bruneau (2022)** stated that “the bounded rationality offers to replace the idea of utility maximization by a more realistic view of economic behaviour involving satisfying and the adaptation of aspiration levels to success and failure”. This theory suggests that people competences of assessment and cogitation enforce cognitive limits on the rationality of individual. Simon (1990) stated that “bounded rationality is a central theme in the behavioural finance, which is deeply concerned with how the actual decision-making process influences the decisions that are reached”.



**Fig. 1.1. Evolution of Behavioural Finance**

**Source: Adapted from Glaser et. al., (2004) and Schindler (2007)**

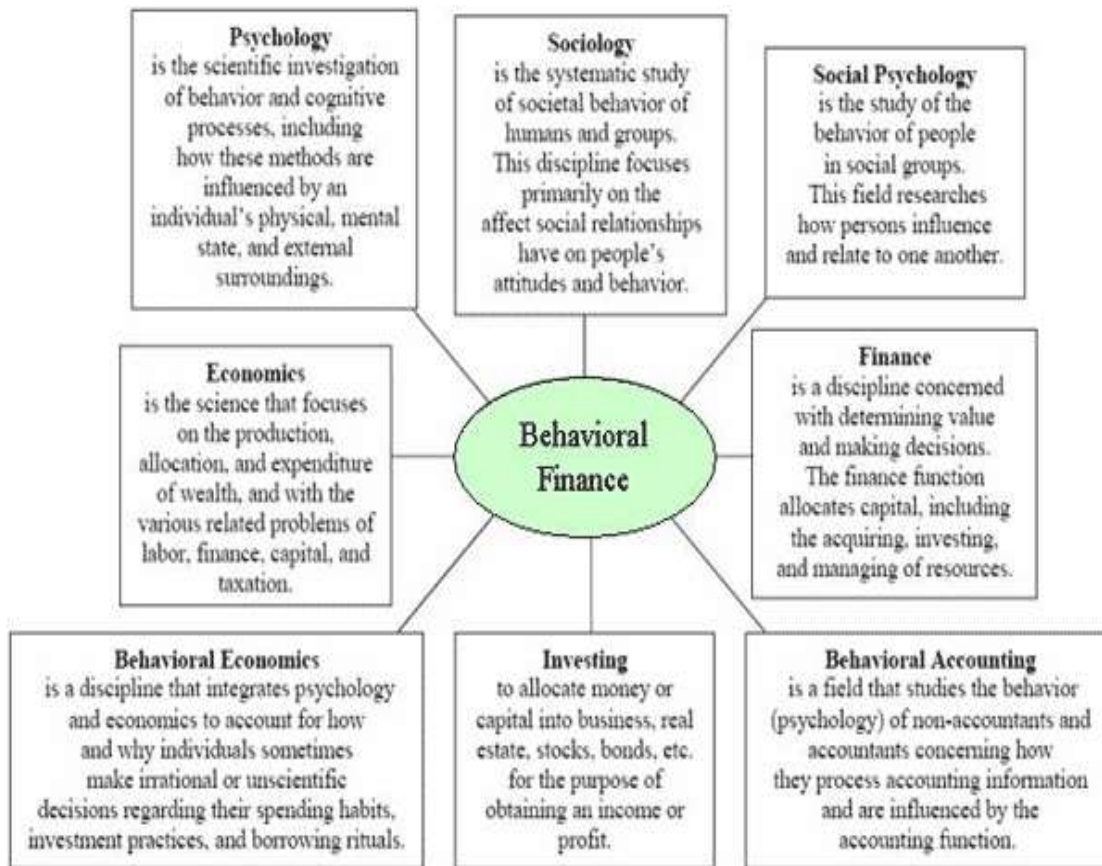
For long, there had been re-emergent challenges and limitations with the conventional concept of Homo-Economicus or “Rational Economic Man”. This theory worked under the presupposition that investors were perfect in their judgement and decisions over financial matters. Therefore, the questioning of this traditional approach finally led to emergence of Behavioural Economics and Finance. The market crash of

2008 compelled the world to dig deep into the foundations of its financial system. **Ariely (2009)** can be quoted on it, saying “In 2008, a massive earthquake reduced the financial world to rubble”. A celebrated former US Federal Reserve Chairman named Alan Greenspan, often also deemed as “the greatest banker who ever lived” is said to have admitted to the Congress to feeling “shocked that the markets did not operate according to his lifelong expectations”. In his own words, he had “made a mistake in presuming that the self-interest of organizations, specifically banks and others, was such that they were best capable of protecting their own shareholders”. The brunt of the event is now being borne by us, who have made a terrible mistake by having unquestionable trust in the ability of the invisible hand to always revert to market equilibrium. Now, more than ever, we recognize the fallaciousness of our standard economic theory– that humans are a breed of “economic men” i.e., creatures capable of considering self-interest and making rational decisions all the time and that on the macro level, markets and institutions are substantively self-directing. The question arises now that if our calculated presumptions regarding how the system is meant to function have proved ineffective in this “hyper-rational world of Wall Street”, how much more disorganization has been wreaked upon other institutions and industries which are relatively more plagued with an error-prone and inefficient workforce? However, this does not mean that the 2008 Economic crash should be held up as our greatest failure since human beings making unsound judgements and suffering the consequences of them is not a new phenomenon. Moreover, following the argument that human beings are “rational economic men” and the various presuppositions about their behaviour, researchers are of the opinion that the human brain does not function so. Rather, it operates somewhat opposite to rationally, falling victim to instant gratification instead of multiplied rewards in the long-term.

Behavioural economics also makes insightful contributions to facilitating the process of decision-making. Intriguing research study from around the globe, namely, **Ubilava (2022)** has reported that any given deal is judged as more yielding when contrasted with a slightly inferior alternative. Another interesting finding by **Hershfield & John (2018)** was the impact of using immersive virtual reality apparatus, to meet their future selves, on the economic behaviour of people. It was done by generating virtual renderings of people’s aged selves and supplying them with interactive decision aids. People’s allocation of resources for their future selves increased because of this activity. A key element in the discipline of Behavioural Finance is focussing on the decision-making process of the investors. It is of utmost importance as an in-depth understanding of the way investors take decisions allows for a better rapport-building between the client and the advisor. Consequently, the client would be able to arrive at the most suitable portfolio commensurate with their preferences and understanding of the security market. This would also be accomplishing most, if not all, “principles of standard finance”.

## 1.2. INTRODUCTION TO BEHAVIOURAL FINANCE

The field of behavioural finance attempts to combine finance and psychology in order to provide a plausible explanation for how financial markets work and how financial market agents behave (Fig. 1.2). The emergence of this field can be attributed to the inability of traditional finance models to explain the empirical financial market patterns. Behavioural finance proposes that the anomalies observed in the real world can be explained by relaxing some of the assumptions of traditional finance theories and models (**Fig. 1.2**).



**Fig. 1.2. Foundation of Behavioural Finance**

Behavioural finance postulates that human beings use a variety of shortcuts and filters while making economic decisions. The human brain is not a machine and it doesn't parallel the functioning of a computer. Instead, the human brain uses various irrational processes in order to make decisions under the conditions of uncertainty. These processes lead to many decision mistakes. These mistakes are systematic and can be predicted. They are prevalent not only among individual investors but also among managers and institutional investors. These suboptimal financial decisions adversely affect the productivity of money markets, own wealth, and the healthy functioning of enterprises. Many crashes and bubbles, which continue to occur in the financial markets around the world from time to time, validate the presence of such factors of emotional as well as behavioural nature that impact the decision-making of a person in financial matters.

Among the earliest evidence of investors' irrationality is "The Dutch Tulip Bubble", also known as its more popular alias "Tulip Mania". It dates back to the "Dutch Golden Age" when the Tulip plant was brought in the Netherlands for the first time. The exotic flower was so appealing to the Dutch people that they started putting in their money in the plant. As time went by, tulip plant investments became a trend and the prices took on from there too, being pushed to newer highs. In its prime, the people were ready to purchase even single bulbs of tulip for over-the-top prices which sometimes reached more than ten times the yearly salary of an experienced worker. When people finally realized that a huge proportion of their earnings was being spent on a flower bulb which did not otherwise hold much value, the market finally collapsed. People started to get rid of their tulip stocks as quickly as possible and the price of the tulips crashed, causing great market losses (Montier, 2009). Such instances pose a serious question on the rationality of investors.

The question of investors' rationality is a representation of the has been, time and again, voiced by many scholars and research-worker, throughout the past. The traditional finance theories revolve around the idea of a "fully rational agent" who makes decisions based only on whatever data is available to him, the information processing ability of investors and concepts and principles backed by mathematical proofs. This

methodology of 'fully rational agent' was deemed the focal point of financial planning and financial decision-making till its forecasts stopped being reflective of the on-ground market situations (Nkukporu, 2020).

In the best-case scenario, a situation where the fully rational methodology is practicable, the financial markets are optimal in terms of information. When markets are efficient, securities are priced by incorporating all the information available in the market and as a result, securities are fairly priced. However, evidence suggests that in the real world, ideal conditions are often violated, and it is reflected in the form of market inefficiencies. The proponents of behavioural finance argue that financial market agents, which include individual investors, are considerably influenced by their emotions and are susceptible to commit more cognitive errors. Investors could lack the self-restraint, miscalibrate information, be overconfident in the abilities that they possess, have an overreaction to new information or exhibit herd behaviour (Kumari & Sar, 2017).

The errors of such types and many others can lead to market unproductivity and can manifest in the way of crises like conjectural bubbles, overreaction or underreaction. Some of the noteworthy examples of these inefficiencies are “the dot-com bubble of the 1990s” (Alekseievska et. al., 2021) and “the real estate bubble of 2006” (Zhou & Somette, 2006). The dot-com bubble refers to the internet boom which occurred during the period 1997 to 2000. The madness of the crowds of investors during this phase was out of control that companies could increase their share prices by adding just an 'e' prefix or a '.com' suffix to their names. This bubble collapsed in 1999-2001 when many of the dot com companies could not survive and eventually failed and went out of business. Even the most stable companies like Cisco and Amazon suffered when the bubble burst (Samal & Mohapatra, 2020).

The 2006 US Subprime crisis is another example of how the irrationality of investors can lead to a global financial meltdown. In 2006, increase in speculation in the United States housing market gave rise to the bubble popularly known as the Subprime mortgage crisis, this time in the real estate sector (Ahmed et. al., 2021). The bubble ultimately burst in 2007 and this ultimately led to the global financial crisis which lasted from 2007 to 2009 (Holt, 2009). The existence of these market aberrations confirms that the financial decision-making process involves more than a “rational agent”. Thus, it became essential to understand such anomalies. The quest to understand such anomalies which could not be explained by the rational agent framework, gave rise to behavioural finance.

All these crises and bubbles give an important insight into what could happen when financial market agents start behaving irrationally. Entire economies and markets collapse and people suffer huge wealth losses. Institutional investors are professional investors and they proactively make efforts to protect themselves against such financial crises. However, it's usually the individual investors who bear the brunt of financial market collapse and are the worst hit among all the stake holders during financial crises. All this can be traced back to decision errors of investors which may be caused due to using shortcuts and emotional filters while making decisions.

## **A BRIEF HISTORY AND EVOLUTION OF BEHAVIOURAL FINANCE**

In order to truly understand behavioural finance, it is important to explain the progression of the theories of behavioural finance from the traditional framework.

**Table 1.1. Theories of behavioural finance**

Author	Proposed	Description
Simon (1955)	Model	Bounded rationality
Festinger <i>et al.</i> (1956)	Theory	Cognitive dissonance
Kahneman and Tversky (1975)	Concept	The researchers identified three key heuristics: representativeness, anchoring and availability bias.
Kahneman and Tversky (1979)	Theory	The authors introduced loss aversion bias by the Prospect Theory
Kahneman and Tversky (1985)	Concept	The researchers coined the framing bias
Thaler (1985, 1999)	Model	The author is known for introducing mental accounting bias
De Bondt and Thaler (1985)	Theory	Introduced the phenomenon of overreaction in the stock market.
Barberis <i>et al.</i> (1998)	Model	Model of stock market participants' sentiments
Statman (1994, 2000)	Theory	Behavioural Asset Pricing Theory
Shleifer (2000)	Model	Introduced an alternative model to the theory of efficient markets to understand inefficient markets.

## References:

AHMED, R., RIAZ, S., AQDAS, R., & HASSAN, S. (2021). The relationship among overconfidence, economic expectation, social factors and investment decision making behavior with the mediating and moderating effects. *Journal of Contemporary Issues in Business and Government/ Vol, 27(2)*, 1076.

Alekseievskaya, H., Yakubovsky, S., & Podgorina, I. (2021, October). The Role of Infocommunication Technologies in the dot. com Bubble and in the Implementation of Unconventional Monetary Policy. In *2021 IEEE 8th International Conference on Problems of Infocommunications, Science and Technology (PIC S&T)* (pp. 265-269). IEEE.

Ariely, D. (2009). The end of rational economics. *Harvard business review*, 87(7-8), 78-84.

Atta, A. A. B., & Marzuki, A. (2021). STAR AND POOR FUND PHENOMENA IN ISLAMIC-AND CONVENTIONAL-FOCUSED FAMILIES: EMERGING COUNTRY EVIDENCE. *Journal of Islamic Monetary Economics and Finance*, 7(2), 263-284.

Bird, G., Du, W., & Willett, T. (2017). Behavioral finance and efficient markets: What does the euro crisis tell us?. *Open economies review*, 28(2), 273-295.

Bruneau, Q. (2022). Converging paths: Bounded rationality, practice theory and the study of change in historical international relations. *International Theory*, 14(1), 88-114.

De Bondt, G., Maddaloni, A., Peydró, J. L., & Scopel, S. (2010). The Euro area bank lending survey matters: Empirical evidence for credit and output growth.

- Goyal, K., & Kumar, S. (2021). Financial literacy: A systematic review and bibliometric analysis. *International Journal of Consumer Studies*, 45(1), 80-105.
- Hershfield, H. E., John, E. M., & Reiff, J. S. (2018). Using vividness interventions to improve financial decision making. *Policy Insights from the Behavioral and Brain Sciences*, 5(2), 209-215.
- Holt, T. P., & DeZoort, T. (2009). The effects of internal audit report disclosure on investor confidence and investment decisions. *International Journal of Auditing*, 13(1), 61-77.
- Hon, T. Y., Moslehpour, M., & Woo, K. Y. (2021). Review on behavioral finance with empirical evidence. *Advances in Decision Sciences*, 25(4), 1-30.
- Jelonek, P. (2006). Rorecasting Stock Market Indices with Behavioral Trend Equations. *Scientific Publications/University of Economics in Katowice*, 39-50.
- Kumari, N., & Sar, A. K. (2017). Recent developments and review in behavioural finance. *International Journal Of Applied Business and Economic Research*, 15(19), 235-250.
- Montier, J. (2009). *Behavioural investing: a practitioner's guide to applying behavioural finance*. John Wiley & Sons.
- Montier, J. (2009). *Behavioural investing: a practitioner's guide to applying behavioural finance*. John Wiley & Sons.
- Nigam, R. M., Srivastava, S., & Banwet, D. K. (2018). Behavioral mediators of financial decision making—a state-of-art literature review. *Review of Behavioral Finance*.
- Nkukpornu, E., Gyimah, P., & Sakyiwaa, L. (2020). Behavioural finance and investment decisions: does behavioral bias matter. *International Business Research*, 13(11), 1-65.
- Samal, A., & Mohapatra, A. D. Standard Finance And Behavioral Finance: A Study On It" s Evolution And It" s Present Status In India. *European Journal of Molecular & Clinical Medicine*, 7(08), 2020.
- Schindler, M. (2007). *Rumors in financial markets: Insights into behavioral finance*. John Wiley & Sons.
- Sharma, A., & Kumar, A. (2019). A review paper on behavioral finance: study of emerging trends. *Qualitative Research in Financial Markets*.
- Ubilava, D. (2022). A comparison of multistep commodity price forecasts using direct and iterated smooth transition autoregressive methods. *Agricultural Economics*.