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A STUDY ON BEHAVIOURAL BIASES

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ABSTRACT
The idea of the paper is to appreciate the paradigm shift from standard finance to sentimental finance and understand the nuances of behavioural biases. The paper being a descriptive one finds out if a relationship exists between the behavioural biases (cognitive and emotional) and investment decisions in Indian stock markets and how demographics impact such behavioural factors through a method of literature review.

KEYWORDS
market efficiency, bounded rationality, behavioural biases.

INTRODUCTION
TRADITIONAL FINANCE
Standard finance has its premises on theories like Harry Markowitz portfolio theory, CAPM, MM Hypothesis, etc. These assume investors are rational and hence markets are taken rational as per Efficient Market Hypothesis (EMH). EMH through three tests of efficiency (weak form, semi strong form and strong form) say investors can't beat the market and prices are not predictable as they follow a random walk. It also says that all the available information gets reflected in the stock prices and any new information or announcement will be absorbed eventually by the stock prices.
However, such traditional theories have a lot of limitations:
1. They assume investors are rational when, in reality they are not. They are always guided by some or the other irrational instinct while making an investment.
2. Based on investors' rationality, EMH proposes markets are also rational when actually they are not.
3. They also make an unrealistic assumption of information symmetry and take information as the sole reason to make profits in the market.

ADVENT OF BEHAVIORAL FINANCE
Efficiency of markets is deep routed in traditional finance and irregularities tend to disappear in the long run as given by **Eugene F. Fama (1998**). Investors were considered utility maximisers and selected optimal portfolios based on rationality. The advocates of rationality supported such notion till the time Bounded Rationality as coined by **Simon (1982)** caught their attention.
When researchers began to realise People are bad Bayesians, they started incorporating psychology with financial decisions and embraced the idea by Meir Statman which said "People in standard finance are rational. People in behavioural finance are normal" with this an altogether new and young framework of Behavioural Finance was born.

PARADIGM SHIFT
Gone are the days when investors were considered to make all their decisions with utmost rationality and have access to all the relevant information relating to the stocks. A new yet realistic concept recognising the impact of emotions and psychology on the investment decisions has made its way through the stock markets across the globe.
Investors do make mistakes, often get carried away by their sentiments and get guided by their emotional quotient more than their intelligence quotient. These behavioural idiosyncrasies are the reflected in their investing which make price deviate from their fundamental values and hence irregularity crops up. Such human foibles have led to many stock market rises and crashes **(Robert Shiller, 2002)**.
Hence, the presumptions of the standard finance theory look less real and criticism to behavioural finance by **Eugene Fama (1998)** seem vague in present context

BEHAVIOURAL BIASES
While making an investment decision, an investor comes across plethora of information which may be complex to understand and comprehend. Hence, investors tend to use filters to make the best possible of the information available in their decision making. Such filters are nothing but the behavioural biases which allow investors to deviate from the path of rationality.
A more clear and technical definition of behavioural biases say "**Behavioural biases** are wrong and potentially damaging **behaviours** caused by erroneous decisions (or unfit reactions) – blunders to use a more explicit word. Unless luck (or serendipity, or some corrective actions) saves the day, they bring usually suboptimal - and often negative / harmful – outcomes".

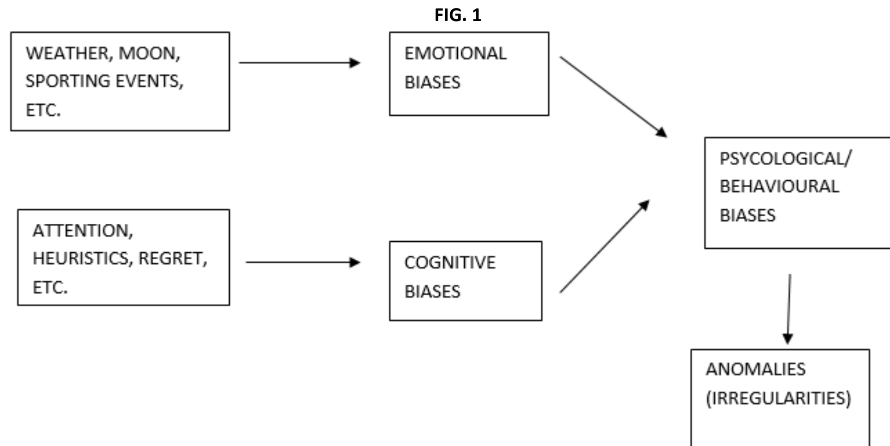
TYPES
1. Disposition effect: It's the tendency of an investor to sell the winning stock and ride o the losing stock owing to reluctance to realise losses.
2. Mental accounting: Investors at times put their money into many areas based on certain criteria which is often subjective and not logical. For instance, they might like to earmark money each month for buying a new house whereas run a huge credit card debt.
3. Herding instinct: When investors follow the crowd especially the peers in order to be better accepted by a group they admire the most, they are considered to have a herd mentality. In this they do not apply their own judgement while making an investment decision and go by the throng.
4. Confirmation bias: This kind of bias arises when an investor puts more weights to the events that have occurred recently than old events impacting their investment decision.
5. Gambler's fallacy: its concerned with short term gains as investors are more likely to short a position when prices go up thinking prices may not continue to rise after this.
6. Status-quo bias: Investors prefer to come to back to the same portfolios and avoid researching new ideas to avoid changes and resulting ambiguity.
7. Familiarity /home bias: when investors are more likely to invest in the investment options which they have heard of or aware of, such bias is likely to emerge.

8. Heuristics: It refers to rule of thumb, historical data and trial and error applied to solve a given problem. It's to simplify the complex information impacting the investment decision available in the market.

The above mentioned classification is the general one. However, the biases can be classified into **cognitive and emotional biases** or **heuristic driven biases and framing dependent biases.**

BIASES AND IRREGULARITIES

FIG. 1



REVIEW OF LITERATURE

Evidences have shown investors are not always rational and stock prices do not reflect all the information (whether public or private) and hence price deviate from their fundamental values **(Daniel et al., 2002)**. Such behaviour is a result of biases (filters).

Tversky and Kahneman (1974) talked of heuristics and later gave the prospect theory in 1979 to explain the biases involved in decision making in detail. Representation bolas, cognitive dissonance, stereotypical biases along with heuristics influence investor behaviours **(Kenneth A Kim et al., 2007).**

The study seeks to review only four biases namely *overconfidence, herding, disposition effect and familiarity bias* in detail owing to the paucity of time and resources.

LITERATURE REVIEW ON SELECT BIASES

HERDING

The tendency to follow the throng (generally peers) has arrested attention of many scholars. The strong evidences of such behaviour have been found in Asian economies with a special emphasis on India nod China **(Paul Lao & Harminder Singh, 2011)**. It was concluded that herding was present in these two economies during extremes market conditions(bullish/bearish). Herd mentality in Chinese economy was seen during bearish phase where it was captured during bullish phase in India. Such analysis was further reaffirmed by **Jaya M. Prasad (2012)**

However, no such behaviour was observed in developed economy like US (**Christie & Huang**, **1995)**. Further, evidences showing individual herding as behaviour driven and institutional herding an information driven added a new angle to the earlier studies **(Shu Fan Hsieh, 2013).** Moreover, the stocks bought by hersd have higher future returns than sold by herds **(Russ Wermers, 1999**)

OVERCONFIDENCE

It occurs when investors believe they know the market well and can predict the returns better than other market participant with reasonable certainty. **Kent Daniel et al. (1998)** wrote in his paper that self-attribution drives overconfidence whereas **Deaves et al. (2008)** seemed to disagree and attributed overconfidence to market experience. There are possibly their categories of overconfidence namely miscalibration, illusion of control and better-than-average **(Glaser & Weber, 2003).**

Studies have also associated demographics (age, culture and ethnicity) to such bias. Males tend to be more over confident than females and hence indulge in excessive trading **(Barber & Odean, 2001)**. Apart from this implication, the other negative impact of overconfidence is that they ignore the informational disadvantage they may be experiencing **(Shefrin, 2000)**.

DISPOSITION EFFECT

The roots of such bias lie in the prospect theory given by **Tversky & Kahneman (1974).** Disposition effect refers to the tendency of investors to keep the loosing stork ant sell off the winning stock **(Odean,1998).** Investors are reluctant to realise losses and hence exhibit such behaviour **(Hersh Shefrin & Meir Statman,1985)**. The supporting evidences have been found in countries like US **(Odean, 1998)**, China (**Chen et al., 2007)** and Finland **(Grinblatt & Keloharju, 2009).**

However, **Lu Feng and Mark Seasholes (2005)** found out that such reluctance can be reduced through sophistication and trading experience.

FAMILIARITY BIAS

Such bias arises when investors prefer investing in avenues that they are aware of. For instance, well publicised stocks via any media or promotional vehicle receive maximum attention even by those who are otherwise non participating **(Henry Lao et al., 2007)**. Such bias makes individuals hold portfolios which are sub optimal and offer least diversification **(Hisham Foad, 2011).**

Following is the tabular representation of the researches on the above select biases which have not been discussed in literature survey.

TABLE 1

NAME OF BIAS	RESEARCHERS	NAME OF BIAS	RESEARCHERS
Herding	Dennis & Struckland (2002) Trueman (1994) Sushil Bikhchandani & Sunil Sharma(2000)	Disposition effect	Calvet et al. (2009) Frazzini (2006)
Overconfidence	De Bondt & Thaler (1994) AS Kyle & FA Wang (1997) Acker & Duck (2008)	Familiarity bias	French & Poterba (1992) Werner & Tesar (1995) Huberman (2001)

BEYOND COGNITION IS THE EMOTION

Emotions/sentiments have a great bearing upon how we react and behave. Same goes for the investment behaviour and decision making. A lot of studies analyzed the impact of emotions and investor's mood on the stock market indicators. Investor's mood has been analysed using proxies such as sprouting events (IPL), weather (monsoon and sunshine), etc. If good weather puts an investor into a good mood, he feels optimistic and is likely to buy securities than to sell them in the market. Hence, if all investors feel the same, this will impact the stock market indicators. Emotions are directly related with optimism which is a **precursor to overconfidence.**

Indians are cricket lovers and religiously follow tournaments and can get overboard with emotions. A study showed with losses in a cricket mats drooped tee stock price while a win didn't influence the prices much **(Vinod Mishra & Rusell Smyth, 2010)**. Not only sports, an appealing weather (a good day sunshine) can impact the mood and in turn the decision to invest **(Alex Edman et al., 2007).**

COEXISTENCE OF MARKET EFFICIENCY AND BEHAVIOURAL FACTORS

The supporters of behavioural models have always been into a tiff with the proponents of EMH. These two paradigms looked extreme ends of the same pole till "Adaptive market Hypothesis" by **Andrew L. Wo (2005)** came to the fore. Such hypothesis reconciled the two theories and conclused market efficiency can exist with behavioural idiosyncrasies.

The study when applied to Indian markets, showed that its cyclical in nature meaning thereby the markets move from efficiency to inefficiency over different periods **(Hilemath & Kumari,2014)**.

Tversky & Kahneman (1992) said the two forces i.e.; efficiency of markets and behavioural finance are complementary to each other.

CONCLUSION

Stock trading and stock markets have become the buzzwords and how they react and behave a hotly debatable issue across all the classes and categories of investors.

When the market reaches its new heights, hopes emerge while hearts beta fast in case it tanks over some points. A large number of investors are investing substantial portion of their funds into these markets, hence it become all the more relevant to study the nuances of such markets in light of behavioural factor influencing an investor's decision which are beyond the rational approach embedded in traditional finance.

Such a study of investor behaviour would also help the Companies to frame those investments that incorporate such factors and hence stay in the market for longer periods.

On the basis 9of past studies, it is concluded that Behavioural factors are very much important in making an investment decision but the rationality of investor and efficiency of stock market cannot be ignored. Hence both these wsourc3s (traditional and behavioural finance can coexist with each other as given by re-searchers.

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