

A Note on Psychology of Investing

Chetan GK¹

Abstract

Behavioral finance is an upcoming area of study that is contemporary and having its importance antecedent from decision theory. It is an interdisciplinary research that blends psychology, finance, and economics which encompasses the varied issues impacting the decision making mechanism and elaborates on irrational behavior of human, herd and organization as a whole. This article addresses the biases an individual will encounter while making financial decisions in his career, under uncertainty. The objective of this review article is to explore various difficulties related to heuristics, cognitive biases, judgments, emotional aspects, moods etc. which influence the financial behavior of an investor.

Key words: Behavioral finance, overconfidence, snakebite, memory, disposition effect
JEL Classification: A12, G00, G14

Introduction

In the investing community there is very famous proverb circulating about the stock market investment that is “there should be no greed and fear”. The question is how many investors are following this religiously? When markets are trading at rock bottom levels individual investors are selling their portfolio out of sheer fear. What has happened when global financial crisis happened in the year 2008-09? Many of the investors including the finance professionals made mistake of selling their portfolio of investments; as they were all panic and no one knew the bottom of the markets.

As everyone knows, to make money in the markets one is supposed to buy low and sell high; then what happened to their prolonged learning of all these years? Many of own clients sold their portfolio when Nifty-50 hit 2600 mark in the year 2009. One needs to know, that was Nifty low and investors would have brought the stocks instead.

Traditional finance is more to do with the measurement of return, risk, hurdle rate, project’s IRR etc. It emphasizes

on how much margin the firm has made and what’s the firm’s value based on the decision it has taken in the past. However, on the other hand behavioral finance is something to do with whether the decisions are really taken rationally all the time, though it is assumed in traditional finance that the humans are rational. What are the biases one goes through in making financial decisions in a firm? Investors through Markowitz portfolio theory find the expected return and risk of a security where as CAPM and other multi factor model theories used in finding the return of the security or a portfolio. Finance in all has various theories, as such an investor can benefit from. Psychologists are in the opinion that some of the assumptions made in finance are bad. Investors behave irrationally and while forecasting they commit serious errors. For instance, traditional finance assumes that the investors are risk averse and they only assume risk when the returns are substantial. For the quantum of risk an investor taking should exactly be rewarded in terms of returns they generate.

Associate Professor, MDI Murshidabad, E-mail – dr.chetan@mdim.ac.in

However, in reality investor by and large tends to violate these assumptions. For the quantum of risk an investor taking should exactly be rewarded in terms of returns they generate. However, in reality investor by and large tends to violate these assumptions. For example, finance managers exhibit risk aversion when buying insurance and simultaneously exhibit risk-seeking behavior by taking naked positions in the derivative markets on their personal accounts.

Majority of the investors behaviors are fallout of prospect theory (Odean, Brad Barbar and Terrance, November/December 1999). This theory explains how investors frame and value a decision associated with uncertainty. This theory states that investors normally forms a reference point based on the past gains and losses for making any fresh investment. Investors feel good when they make Rs. 1,000 profit. They feel better when they make Rs. 2,000 profit. Also, they do not feel twice as good when they make Rs. 2,000. On the other hand, if investor loses Rs. 1,000 they will not feel twice as bad as against making a loss of Rs. 2,000. However, investors feel impact on gains is more positive as compares to losses.

Overconfidence

Psychologists have set out that overconfidence causes people to bloat their knowledge and undervalue the risk and overemphasize their capability to control an action. A study has been undertaken by (Svenson, Ola, 1981) employing college students to test the driving ability and majority of them rated themselves as above average, meaning that they are above average drivers. But it was found out that they were not the above average drivers and were overconfident about their driving ability.

Start-up venture or entrepreneurship is a risky as the new businesses are more likely to fail. It was found that (Arnold C. Cooper, Carolyn Y. Woo and William C. Dunkelberg, 1988) when 2,994 new venture owners were administered, they were in the opinion that the survival chances are as high as 70 percent but in reality only 39 percent of the businesses were successful. The reason for this biasness is, in general human beings are overconfident.

Overconfidence also alters investors' risk taking ability. Investors who are rational will always try to maximize the return for a given level of risk. Overconfident investors on the other hand forget the amount of risk taken and ultimately they achieve lesser overall return on their investments. Overconfident investors tend to buy risky stocks such as penny stocks, high beta stocks, stat-up equity etc. and on the top of that they tend to under-diversify their portfolios. The study of (Odean, Brad Barbar and Terrance, November/December 1999) showed that overconfident investors take higher risk and their findings say that single men have the tendency of assuming highest risk followed by married men, married women and single women.

Pride and regret

Human behavior is such that they foresee actions which gives them pride and would want to avoid such actions that gives them regret. As pride is joy and regret is an emotional discomfort. The financial economists (Hersh Shefrin and Meir Statman, 1985) found that selling early the winners and holding on to the loser stocks by the investors. As selling the winners would be soothing experience and investors don't want to book losses on their loosing stock and rather want to ride them as the investors not really ready to

take the discomfort (of losing money). They call this as disposition effect.

(John R. Nofsinger and Abhishek Varma, 2013) studied actual trades of investors between 1991 and 1999 about the frequency of buying the same stock that is previously owned and what kind of emotional experience they had. They found that firstly, investors if they sell a stock where they made loss would regret for the purchasing the stock and there are less likely chances that they repurchase the same stock later. Secondly, if the investors sold a stock in which they have some gains and after selling the stock if the price goes up and for which investor regret for selling the stock so soon and there are less likely chances that they repurchase the same stock in the future. Thirdly, if investors sell a stock, in which they had gains and after selling the stock, the price of the stock declines. Because of which investor feel happy about the gains made and timing of it which is more likely that, investor repurchases the same stock later.

Risk conceptions

Investors perception about risk tends to vary based on the different situation he faces. Supposing an individual lost Rs. 100 on a lottery ticket which he bought last week. What is the probability that he purchases one more lottery ticket now? In another scenario an individual won a prize amount of Rs.10,00,000 upon buying the lottery ticket which he paid Rs.100 last week. What is the probability that he purchases one more lottery ticket now? Whether this gamble made him look any different to that individual? So it has been said that, it depends on the situation that an individual is interested in taking risk or not to take risk. Here the people's reaction to the risk is changing based on the situation. Here the reference point is the past outcome. These risk perceptions are divided into various types:

House-money effect: First, we will understand this with a gamble example. Supposing a gambler earns a quick buck at casino Rs.5,000 on a bet of Rs.200, what are the chances that he will take one more high risk bet immediately? On the other hand, what if the gambler lost Rs.200 completely and what is probability that he will take one more high risk bet immediately? Gambler refers this behavior as playing with house's money. Novice gambler tend to feel that the money what they won will not consider as their own money and hence they continue to take big risky bets with the opponents money (what they feel is) as they don't integrate their winnings with their own money.

(Massimo Masna and Andrei Simonov, 2005) Conducted a study in Sweden with both stock market and real estate. They found that increased capital gains in the current year leads to a higher amount of risk taking in the next year, which was consistent with the house-money effect. They also found that investors bought more risky stocks after booking a winning position in the market.

Snakebite: Individuals majorly will not take up risky bet after they suffer from financial loss. After losing money at the gamble, individuals are less likely to accept one more bet. Gamblers after losing their house's money might have felt like 'snakebite'. Snakes do not generally bite people. However, when they bite, people tend to be more circumspect. Gamblers after losing their money feel that they are now unlucky and ward off taking subsequent bets. This is particularly true when new entrant to the stock market. In the year 2008-09 when the global financial crisis happened, many of the first timers bought stocks in the month of Jan., 2008 looking at the market returns of Nifty -50 constituent stocks. Because of the subprime crisis, Nifty – 50 index corrected almost 60 percent just in a span of 11

months. Most of the new entrants to the stock market felt a snakebite. Majority of those resisted stock markets and never entered after that. Nifty – 50 made a high of 12,389 on January 2020 as against low of 2,959 on 31st December, 2008¹. After that these new entrants never looked back into investing in stock market because of snakebite effect.

Trying to break-even: There is a critical and dominant exception to the risk aversion response to a loss. Individuals oftentimes tend to win back the losses they made at the gamble. Due to which they tend to take sometimes larger bets to recoup the losses made, though there are less chances of winning. And desire for brek-even turns out to be more dominant than the snakebite. (Joshua Coval and Tyler Shumway, 2005) conducted a study of fulltime proprietary trades in the T-bond futures contract at CBOT (Chicago Board of Trade). These traders normally take risky positions during the day in a view to provide market making services to earn profits also these positions are maximum kept for that day only. They investigated 426 such traders in 1998 and found that after incurring losses in the morning, these traders added high risk trades to make up losses made in the morning. They thought that in this way they can recover back the losses mounted-up in the morning session. However, it is been observed that on an average the trades they have taken up in the afternoon turns out to be bad.

Memory and making investment: Memory whether it is good or bad will be stored in the minds of the individual. Whenever individual wants to make investment, whether he likes it or not, it will have influence on the new purchase. The perception purely depends on the way the prevailing situation change. The memories which were unable to retrieve in

fullest way would also cause inferior decision making. Suppose an investor buys two company stocks. One is into infrastructure and the other one into realty sector. Assume that each stock bought for Rs.500. Throughout the next year the price of infrastructure stock slowly declines to Rs. 400 and price of realty stock stays at Rs.500 till the end of that year. After that the realty stock tanks to Rs. 415. In that year the infrastructure stock underperformed that of realty stock. As we could observe, both the stocks have not given any return but the investor

lost some money holding both of the stocks. The stock price of infra stock came down bit by bit whereas the price of realty stock came down in one go at the end of the year.

Investor in these stocks experience high level of emotional pain, holding the realty stock than infra stock though the loss incurred in the infra stock is huge. Because of catastrophic fall of realty stock at the end of the year, the individual experience higher degree of pain compared to gradual fall in the infra stock. The memory of huge loss in the realty stock at the end of the year is coupled with the great amount of psychological pain. On the other hand, memory of gradual loss in the infra stock generates less psychological pain. The individual while making investment decision for the fourth coming year may not be positive about including the realty stock in the portfolio of investments.

Cognitive dissonance: Investors prefer to lower their emotional pain by fine turning mind set about the gains from the previous investment decisions.

Mental accounting in the light of investment

Investors tend to distinguish each investment into a separate mental account. That is each investment is segregated

separately. This process of bundling the investments may negatively affect the wealth in many ways.

Investors bundle their experiences based on gains or losses. They normally group all the loss making trades as one group and profitable trades as another group. Investor would take up all the trades which are, loss making in a single day whereas profitable ones closed out in a phased manner or in group. It is done by the investor to have less emotional pain in the losing trades. In case of gaining trades, investors feel emotionally happy and would like to close out the trades in staged manner, as the winning trades gives happiness which the investor wants to spread across various time frames (or may be in one go if the investor feel so).

(Sonya Seongyeon Lim, 2006) examined behavioral pattern of 50,000 brokers' pool accounts between 1991 and 1996; found that investors majorly tend to sell more-than one loss making stock on the same day. Whereas, if a profit making stock is sold, selling another profitable stock on the same day is less likely. She concludes that "Investors can maximize their happiness by savoring gains one by one, while minimizing the pain by thinking about the overall loss rather than individual losses."

Representativeness and Familiarity

Representativeness: While making investments in the stock markets investors normally do mistake of representativeness. The famous misconception is investors normally confuse good companies with good investments. Good companies need not necessarily be good investments. It's a good company in the eyes of investors because of treating its employees humanly, they have good management, good track record of the promoters or chairman, company's earnings may be great or revenue is growing nicely year on year and

may have good growth in the margin of safety etc. Are good companies are great investment alternatives all the time? The answer to this question is no, as per the study conducted by (Statman, Michael E. Solt and Meir, 1989).

(Lakonishok, J., Shleifer, A., & Vishny, R., 1994) examined the return profile of those stocks which the investors generally label as growth stocks and value stocks. They collected the stocks data from New York Stock Exchange and American Stock Exchange between 1963 and 1990 to evaluate the performance of growth and value stocks. They want to measure the performance of growth and value stocks for five years' time horizon. Their findings suggest that average return in case of growth stock stood at 81.8 percent and for value stocks 143.4 percent. Good companies not all the time are great investments avenues and investors by and large mistake that the past performance of the companies are representatives of future performance. Investor will not consider any other information which does not fit into this conception. Bad companies, does not non-perform forever just as good companies perform well forever.

Familiarity: When individuals have two risky options and they tend to choose the one which they know more and familiar to. (Chip Heath and Amos Tversky, 1991) showed that if there are two gamble games options available, gamblers choose the gamble in which they are familiar with. Even though if they know that chances of winning are less (the one they are familiar with), they choose the gamble which they know compared to the other one.

This familiarity can be found in investment too. There is general tendency among individuals that they tend to choose the stuffs which are familiar to them. It's a usual behavior among the employees that

they invest in their own company's stock as they are familiar about their company. Even though those investors know that if they invest in other company's stock they can make good money.

Societal interaction and investment

Individuals learn from interacting with the circle they are into. For example, doctors interact with fellow doctor or with other professional when they meet each other on a platform called as clubs. They discuss on various topics and even on investments such as investing in stock market, investing in mutual funds, investing in a piece of land etc. Individuals seek opinions on investing on social media, communicating with brokers, read analysts' reports, looking at the portfolio of investments of successful investor etc. (Robert Shiller and John Pound, 1989) carried survey of 156 high net worth individuals and found that more than 50 percent of the times that an individual becomes interested in a stock because some of his connections mentioned it. So it is evident that when an investor interacts with the others he takes out some or gives some clue about where to invest. This normally has some impact on the future investments an individual make.

Gains of being discipline

Investors at large want to save money for retirement by sacrificing the current consumption as the long term benefits outweigh the pain of sacrifice made. However, they also know that desire for the current consumption is higher than the desire for savings for long-term. Meaning that, investor needs greater will power to save for long-term. Investor wants to control their desire, to save for their future wellbeing. In order to control their desire for present consumption, many investors would opt for auto debit for their salary account for retirement savings. We

can observe that many individuals normally give standing instructions (bank) to their salary account to buy insurance, mutual funds or housing loan EMI etc. Having financial discipline will help the investors. This is a kind of controlling mechanism adopted by the investors to win over the desire for present consumption.

Conclusion

There is a famous proverb on Wall Street that the stock markets driven by two major human sentiments: fear and greed. In deed this article advocates that investors are influenced by these beliefs. And getting carried away by these emotions is not considered to be the sane move. Usually, long term investments should be done by without attaching any such emotions. If investor knows how human mind works in general when it comes to investing, would defiantly be helpful in making concrete investment decision without much biasness. It substitutes normal people to rational people in standard finance. Behavioral finance gives hint about how an individual react to various circumstances while making investment decision. Finance manger working in any company would find these concepts certainly be helpful before making any decision for the firm.

References

- Arnold C. Cooper, Carolyn Y. Woo and William C. Dunkelberg. (1988). Entrepreneurs' Perceived Chances for Success. *Journal of Business Venturing* 3, 97-108.
- Chip Heath and Amos Tversky. (1991). Preference and Belief: Ambiguity and Competence in Choice. *Journal of Risk and Uncertainty*, 4(1), 5-28.

- Hersh Shefrin and Meir Statman. (1985). The Disposition to Sell Winners Too Early and Ride Losers Too Long: Theory and Evidence. *Journal of Finance* 40, 777-790.
- John R. Nofsinger and Abhishek Varma. (2013). Availability, Recency, and Sophistication in the Repurchasing Behaviour of Retail Investors. *Journal of Banking & Finance* 37, 2572-2585.
- Joshua Coval and Tyler Shumway. (2005). Do Behavioral Biases Affect Prices? *Journal of Finance*, 1-34.
- Lakonishok, J., Shleifer, A., & Vishny, R. . (1994). Contrarian Investment, Extrapolation, and Risk. *The Journal of Finance*, 49(5), 1541-157.
- Massimo Masna and Andrei Simonov. (2005). Behavioral Biases and Investment. *Review of Finance* 9, 483-507.
- Odean, Brad Barbar and Terrance. (November/December 1999). The Courage of Misguided Convictions. *Financial Analysts Journal* 55, 41-55.
- Robert Shiller and John Pound. (1989). Survey Evidence on Diffusion on Interest and Information Among Investors. *Journal of Economic Behaviour and Organization*, 12, 47-66.
- Shefrin, H., & Statman, M. (2000). Behavioral Portfolio Theory. *Journal of Financial and Quantitative Analysis*, 35(2), 127-151.
- Sonya Seongyeon Lim. (2006). Do Investors Integrate Losses and Segregate Gains? Mental Accounting and Investor Trading Decisions. *Journal of Business* (79), 2539-2573.
- Statman, Michael E. Solt and Meir. (1989). Good Companies, bad stocks. *The Journal of Portfolio Management*, 15(4), 39-44.
- Svenson, Ola. (1981). Are We All Less Risky and More Skillful Than Our Fellow Drivers? *Acta Psychologica* 47, 143-148.

Source:

https://www1.nseindia.com/products/content/equities/indices/nifty_50.htm accessed electronically on 18 March, 2020.