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Individual Investor Behaviour: Pre and Post Crisis Study on Bahrain

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Abstract
This study examines the psychological bias disturbing the behavior of investors in Bahrain in investment choices before and after the 2007-2008 economic crises. Presumptions of behavioral finance are used to help in understanding precise behaviors of investors that led to vast losses, in hope that they may be prevented in the future. The major psychological biases examined are overconfidence, representativeness, loss aversion, regret, and group behavior. Five interviews where done with managers in Bahrain, questionnaires have also been distributed to a group of investors. The study revealed that the psychological preconceptions affected investors before and throughout the crisis, heading to great losses that may have taken part in intensifying the crisis. Results showed, as there was an optimistic relationship between regret and group behavior, this association did not exist after the crisis as investors became more cautious about making investment decisions. Implications of findings also discussed.

Keywords: economic crisis, heuristics, loss aversion, risk, investor behaviour

INTRODUCTION

Bahrain is positioned in the heart of the Arabian Gulf. Its banking and investment segment have been a well-built foundation for the growth of the national economy. The financial association and investment segment remains the highest contributor to Bahrain's GDP after the industry of oil and gas (Global Investment House, 2007). However, the 2007-2008 financial crisis stroke the country straight through the banking and investment segment, and ending in vast losses for local investors. Investment losses and errors can be clarified by involving the psychology of the human with decision making by behavioural finance. Therefore, the theories of behavioural finance will be used to understand the purpose behind the losses for the investors.

Since Bahrain is believed to be one of the "emerging economies" in its investment and financial sectors, it would be exciting to study about the psychological theories behind local investor's behaviours with respect to investment choice's that may have rooted capital losses during the financial crisis of the year 2007-2008. Investors could contribute to the growth of the economy with enhanced investment act. Following the slow economic growth in Bahrain in 2008 as a result of the recent crisis, it's worth recognising the changes in the behaviour patterns for individual Bahraini investors as they make investment decisions post-crisis. Understanding and appreciating the course of action that leads to imperfect investment decision making dovetails with Bahrain's 2030 vision of being able to better face challenges and take advantages of opportunities in the economy; this will help Bahrain prosper (Bahrain Economic Development Board, 2011). Furthermore, contrasting the differences in these issues before and after the economic crisis would be essential for diverse stakeholders, as well as the government and educational and financial institutions.

Seven goals of the study have arisen to assemble the objective. The first five aims are to test whether the five psychological factors (Representativeness, Overconfidence, Loss Aversion, Regret, and Herd Behaviour) exist within the decision-making behaviours of Bahraini investors before and after the crisis of 2007-2008. The sixth aim is to discover any existing relationship between investor overconfidence (due to having more information with the advent of the Internet) pre-crisis and post-crisis. The seventh aim is to study the relationship between Regret and Herd Behaviour during the pre and post-crisis period.
The intention of this study is to identify the psychological preconception that is affecting the performance of investors in determining investment decisions prior to the crisis of the year 2007-2008, and to know if they have learned an important lesson from the economic crisis.

The financial association and investment segment remains the highest contributor to Bahrain's GDP. The 2007-2008 financial crises hit the country directly through the banking and investment sector. Investment errors and losses can be explained by linking psychology with decision making; known as behavioral finance. Behavioral finance will be used to understand reasons behind losses for Bahraini investors.

THE LITERATURE REVIEW

Grinblatt and Keloharju (2000) identified behavioural finance as the study of the psychological factors that influence financial decisions. This area of finance recognises the individual attributes and psychological factors that shape investors' behaviour during the decision-making process (Linter 1998; Olsen, 1998; Ritter, 2003). Formlet (2001) clarified that knowledge taken from psychological biases and from finance theory is employed in the behavioural finance area to further recognize the relationship between individual behaviours and market phenomena.

Behavioural finance greatly influences investment performance, and the concepts that inform it could lead individual investors to substantial losses (Nofsinger, 2008). Investment performance can be improved by helping investors understand the psychological biases that impact their behaviour; this is accomplished by linking theory to individual investment behaviours. In particular, helping investors avoid repetition of errors through the understanding of behavioural finance concepts would lead to superior investment performance (Shefrin, 2002).

Making familiar with the Emergence of Behavioural Finance is important at this point. Throughout the 1980s, researchers happened to understand that the traditional finance theory did not clarify security prices, and that there were inconsistent in financial markets. The idea of behavioural finance developed from the studies done by psychologists and irritated the interest of economists in series with this understanding.

The three main authors who played a significant role in the development of the behavioural finance field were Solvic, Kahneman, and Tversky (Shefrin, 2002). The two studies of Solvic (1969, 1972) shed light on the significance of behavioural studies to financial markets. In the 1969 study, the decision-making practice of stockbrokers was studied; the concluding study looked at the psychology of the individual investor throughout decision making. The study of behavioural concepts by Tversky and Khaneman (1974, 1979) linked Solvic's initial studies to the overall field of finance. These studies talk about the heuristic-driven error; the other deals with frame dependence and prospect theory. More recently, Barberis (2010) discussed in his working paper the psychology of the financial crisis of 2007-2008 by applying behavioural finance theories to the investor decision-making behaviours that might have caused the crisis.

A comprehensive analysis of investment behaviour from a psychological perspective has been impossible to date due to data limitations (Grinblatt & Keloharju, 2000). In spite of this, a small number of studies have highlighted factors that affect individual investor's financing and investment strategies in rising countries. No study has been established regarding whether investors changed their psychological biases after the 2007-2008 financial crisis.

Furthermore, a study conducted by Al-Ajmi (2008) in Bahrain predicted the outcome of socio-economic factors on the behaviour of individual investors in Bahrain. Still, no study to date verifies the psychological factors that affect the decision-making pattern of individual Bahraini investors. The recent study strives to fill this gap by concentrating on the psychological factors that influenced the actions of individual Bahraini investors as they made investment decisions before the crisis, and whether these behaviours have altered.

Behavioural Finance versus the Efficient Market Hypothesis has been popular in the literature. "Investors are striving to do the right thing, but they have limited abilities and certain natural modes of behaviour that decide their actions when an unambiguous prescription for action is lacking" (Shiller, 2005). Barberis and Thaler (2003) explained that traditional finance theory presumes that investors make logical investment decisions, while behavioural finance believes that investors are human beings and are likely to irrationality. While investors try to be rational, psychological biases that can be explained by behavioural finance lead them to irrational decision-making behaviours when it comes to investments (Ackert & Deaves, 2010).

The Efficient Market Hypothesis (EMH) is the most vital theory in traditional finance. This theory is based on the assumption that all new information is incorporated in the pricing of securities (Elton *et al.,* 2007; Gitman & Joehnk, 2008). Statman (1999) demonstrated that traditional finance theory overlooks the cognitive and emotional weaknesses that influence human beings and hence investors. Thus, the idea of behavioural finance accounts for these factors and recognizes the common sense of investor's investment decisions behaviour.

Unfortunately, in this century, most economists and analysts pay no attention to individual feelings, passions and impressions when analyzing economic events such as financial crisis. In reality, it seems that the key causes of these economic events are entrenched in the everyday thinking of individual investors, with its extensive variety of irrational behaviours (Akerlof & Shiller, 2009). Fama (1998) clarified that the most important criticism of behavioural finance as a hypothesis is that no one hypothesis or theory exists that describes the psychological factors of decision making in investment. on the other hand, Shefrin (2002) explained that investors form investment decisions in a behavioural way that results through heuristics-driven bias, frame reliance, and the emotional timeline. Hence, this study will focus on these three major behavioural theses as developed by Shefrin (2002). Every topic is abided by a description of the psychological factors that lead to investment mistakes. The psychological factors that affect investor behaviour are also analysed in this study.

One of the most important psychological factors is Heuristics-Driven Bias. It is the route of building "rules of thumb" on the basis of other people's findings through trial and error (Gilovich *et al.*, 2002; Shefrin, 2002). Tversky and Kahneman (1974) established that investors do not compute chances or use numerical theory to assist their investment decisions. Relatively, investors depend on specific heuristics that could either lead to logical choices or to errors. In circumstances where investors have to assess the probability of an event happening, they base their decisions on chances brought to their minds by past events and experiences. Baker and Nofsinger (2008) justified one of the main reasons of psychological biases in an investor, heuristic simplification, in which the brain sorts out information and uses shortcuts to make estimates before regarding all obtainable information. Overconfidence and representativeness are important examples of heuristics that affect the decision making of individual investors (Gilovich *et al.*, 2002).

The other factor is representativeness. It is probably the most important heuristic (Nisbett, 1993). It assumes that investor judgements are based on stereotypes; in other words, the investor's brain predicts the future by examining previous circumstances that are similar, and the types of decisions made to cope with these circumstances (Shefrin, 2000). In reality, investors tend to judge the probability of an event happening based on relating similar things to each other: for example, linking stock growth with the company growth, or historical prices and dividend yields with stock growth (Lakonishok *et al.,* 1994; Fisher and Statman, 2000).

Humans tend to think these elements are correlated to each other; however, the correlation is not perfect, and believing that it is could in some circumstances cause considerable losses (Tversky & Kahneman, 1974). Moreover, sticking with an investment on the root of these kinds of associations could guide someone to hold a position they must obviously get out of in order to cut down their losses. This could deteriorate the primary loss associated with the position (Fisher & Statman, 2000).

The third important psychological factor is overconfidence. Extensive evidence illustrates that people are overconfident in making their judgements (Barberis & Thaler, 2003). Lundeburg *et al.,* (1994) said that overconfidence is one of the essential heuristics that influence investment decision-making. Overconfidence directs investors to overvalue forecasts about upcoming returns and put themselves at jeopardy for great future losses. Nofsinger (2008) established that the delusion of knowledge and the delusion of control are the key factors that because investor's to feel overconfident in decision making.

Many psychological preconceptions are taken from the prospect theory) developed by Khaneman and Tversky (1979). The prospect theory studies human behaviour from the basic advantage of how they see their predictions in terms of financial gains and losses, and suggests that investors value gains and losses in a different way. Because of this difference in perception, investors base their decisions on perceived gains rather than perceived losses. If investors were given two equivalent choices, one expressed in terms of gains and the other in terms of losses, they would choose the choice expressed in terms of gains.

Furthermore, an additional theme that is given in behavioural finance and exposed by the prospect theory is frame dependence. "The term frame dependence means that the way people behave depends on the way their decision problems are framed" (Shefrin, 2002, p.29). While the usual traditional finance theory presumes that framing is apparent, and that investors can observe cash flows in diverse ways, behavioural finance theory mentions that frames are not clear and therefore lead investors to depend on frames they have employed in the past to make an investment decisions (Thaler, 2005). Investors who require clarity on an investment decision are likely to take shortcuts and predict the return on the investment on the basis of formerly used frame (Mitchell and Utkus, 2003).

Loss Aversion is another factor which influence the investor behaviour. Loss aversion is the leniency for investors to respond to gains and losses unevenly (Tversky and Kahneman, 1986) due to cognitive bias that impacts decision making. Heath *et al.,* (1999) expressed that investment returns that are likely to become losses are twice as painful as equivalent gains. Consequently, investors tend to hide from losses by holding them, believing that they will become winners in the future. Instead, they end up facing huge losses (Bodie *et al.*, 2008; Gitman & Joehnk, 2008; Forbes, 2009). This investor behaviour is called *"get-evenitis"* by Shefrin (2002).

Thaler (2005) described the loss aversion behaviour of investors on the basis of the prospect theory value function that, the losses role seems to be unreasonable than the gains function, showing that investors are risk averse and conceal more from losses than from gains. Tharp (2007) assured that investors favour having a possibility or a chance of losing cash to a certain loss. Investors tend to encompass risk-seeking performance in this situation. Furthermore, they tend to accept paying insurance against their losses, due to the loss aversion effect.

The behaviour of amplified investor care after going through a loss could be referred to the snakebite effect, illustrated by Nofsinger (2008): "snakes don't often bite people, but when it happens, the person becomes more cautious".

The other major psychological factor which can affect the investor behaviour is theory of regret "Regret is a cognitively mediated emotion of pain and anger when agents observe that they took a bad decision in the past and could have taken one with better outcomes*"* (Michenaud & Solnik, 2008). From an investment option insight, investors do face an emotional response in buying or selling a specific investment based on their personal experience of investing. This emotional suffer or pain comes from regretting the past opportunity cost which has an effect on the investor's behaviour. Shefrin and Statman (1985) have related this hypothesis to investor psychology. Investors opt to stay away from regret and search for pride by selling their gains or successes too quickly and holding on to their losers too long. This is called the disposition effect (Odean, 1998; Shefrin, 2002; Nofsinger, 2008). Thaler (2005) showed that the prospect theory described how an investor attempt to make the most of his utility function by attempting to sell winners and hold losers to steer clear of regret.

The Emotional Timeline can also effect the behaviour of the investors.. Cohen (2001) affirmed that investor's tolerance for risk can be clarified and explained from the perception of emotions, where emotions measure the acceptance of risk and therefore affect investment decision-making. Lopes (1987) recognized fear and hope as aspects that persuade the investor's patience and tolerance to risk and investment options. Shefrin (2002) initiated that a relation exists involving hope and fear and pride and regret. If the hoped-for outcome occurs then the investor changes this feeling to pride. Meanwhile, if there is fear or anxiety about a certain decision that led to losses, it then changes into regret. As investors have a tendency to respond less to fear and more to hope, they tend to go after other investors in order to to reduce their emotion of "regret pain" (Nofsinger, 2008). This is characterised as herd behaviour. Hirshleifer and Teoh (2003) classified herding in financial markets as replication that triggered a joining of action. According to Nofsinger (2008) *"as you learn what other people think about various stocks, the social consensus forms. As people act on this consensus, a herd forms"*. Investors give consideration to what other investors are actually doing, and behave in the same manner as a mass or herd of investors (Shiller 1995, Beltratti, 2004). Nofsinger (2008) made clear that it is evident that people have investment discussions during public occasions and through online internet discussion groups which draws them to a specific investment and directs them to herd. Ackert and Deaves (2010) approved that individuals take actions illogically in the same manner as their peers due to the persuasion of their interactions with each other. As the price of a certain product increases, investors hurry into purchasing this product, assuming that the investment can offer a great profit.

A number of studies have confirmed the existence of herd behaviour in usual market conditions. Triantafyllopoulos and Kandyla (2010) results of a study demonstrated that individuals who purchased a house were induced by information that is attained from the social environments and media.

RESEARCH QUESTIONS

- Does representativeness affect the behavior of individual Bahraini investors in the investment decision-making process?
- Does overconfidence affect the behavior of individual Bahraini investors in the investment decision-making process?
- Does loss aversion affect the behavior of individual Bahraini investors in the investment decision-making process?
- Does regret affect the behavior of individual Bahraini investors in the investment decision-making process?
- Does herd behavior affect the behavior of individual Bahraini investors in the investment decision-making process?
- Is there any relationship between the internet effect and over confidence?
- Is there any relationship between regret and herd behavior?

METHODOLOGY

The paper presents an insight into the technique used throughout this study, and explores the diverse research philosophies and methods used. The method for data collection and study demonstrated and the ethical concern and study boundaries were made clear. In order to make out these diverse philosophies, data were collected and then a hypothesis tested. The methods used for data collection were questionnaires and the primary research was done. Seven research questions are analyzed through this study.

Interviews were conducted as a supplementary method to get opinions about the Bahraini investors' behaviours before and after the crisis of 2007-2008 and analyse the information given by them through surveys. Quota sampling was used to choose five experienced people who have great experience in dealing with investors in. To attain different points of view, interviews were divided into a number of categories.

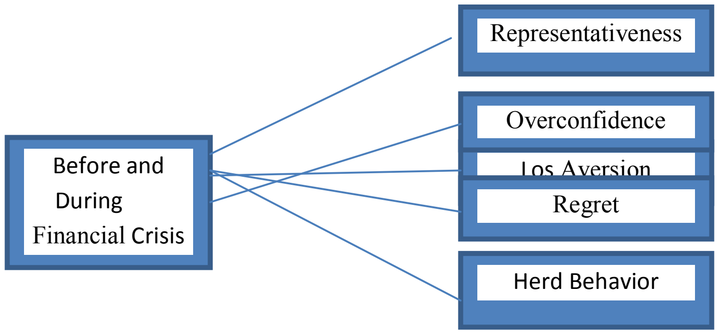

Figure 1: Interview Template: Template for Interviews Before The Crisis

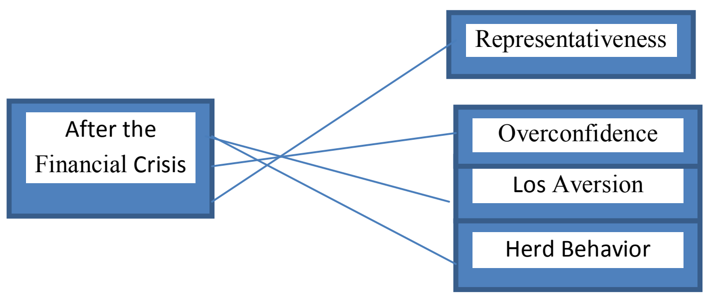

Figure 2: Interview Template: Template for Interviews After The Crisis

Table 1: Interviewees Information.

Interview No.	Interview Job Title	Name of Organization Type
1	Executive Director	Multinational Business Organization
2	Chief Executive Officer	Finance Exchange
3	Deputy Chief Executive Officer	Conventional Bank
4	Managing Director & CEO	Islamic Bank
5	Chairman	Financial Institution

DATA PRESENTATION AND ANALYSIS

All interviewees agreed that Bahraini investors have some similar perspectives concerning stocks. One factor leading to representativeness was the linking of company growth with stock growth. Another factor leading to representativeness was historical performance. The performance of a company should not be related to its past performance, which can cause huge losses. Dividend yield should not be linked to stock growth as there is a weak relationship between both.

All interviewees agreed with the argument that more information results in more overconfidence. Information could come from the internet, the media, and on-line forums which could lead to wrong decisions. The illusion of knowledge makes investors believe that when they receive more information a perfect decision could be made. Bahraini investors are influenced by the amount of information available on-line which could attribute to illusion of knowledge and overconfidence.

The questionnaire responses from Bahraini investors show that the effect of the Internet on investor behaviour has not changed after the crisis. The Bahraini investor, where 40 out of 50 investors (80% of them) agreed that they are influenced by the amount of information available on-line, which could be attributable to the illusion of knowledge and overconfidence. This contradicts one of the interviewee's conclusions on the change of investor behaviour after the crisis that "they hear news and it doesn't affect them" (Interviewee 2).

When investors were asked if they are better than the average Bahraini investor 24 agreed and 26 disagreed. As one of the interviewees clarified, "They might become confident but not to a large extent; that's mainly because what they have learned from the crisis" (Interviewee 1), this proves that investors are less overconfident (or confident in general) in their decision making after the crisis, and are not prone to the illusion of control factor defined in the literature chapter. Another interviewee confirmed that "investors are more cautious and less confident" (Interviewee 5).

Interviewees as a whole agreed with the concept that Bahraini investors consider losses twice as painful as gains. According to questionnaire results, Bahraini investors are more influenced by the loss aversion factor after the financial crisis. Psychologically, investors believe that losses are far more important than costs, which could lead to framing negative outcomes.

According to the questionnaire results, Bahraini investors are more influenced by the loss aversion factor after the financial crisis, that 34 out of 50 investors prefer a 25% chance of losing BD200 than a sure loss of BD100, meaning that they are willing to take more risk in this case. This corresponds with the views of all of the interviewees that, after the financial crisis, Bahraini investors "became more loss averse*"* (Interviewee 5).

More than half of the Bahraini investors (28 out of 50) choose to pay BD50 insurance to cover a 25% risk of losing BD200. This clarifies that Bahraini investors psychologically believe that losses are more important than costs, which would lead them to potentially frame negative outcomes. Furthermore, an example of how they became more loss averse was clarified by one of the interviewees, who stated that "nowadays, it is very important for them to make sure that they are confident and they have enough cash flows for the coming projection period" (Interviewee 4). This is confirmed by Thaler and Johnson (1990) that investors would not accept the idea of loss after experiencing a painful loss.

Investors are affected by the regret and disposition effect in framing investment decisions. They tend to sell winning investments and hold losers, expecting them to rise. The majority of Bahraini investors would sell stock B, which has decreased in price, to have money in hand to pay for other commitments. This shows that they have learned from the huge losses that occurred during the crisis.

Outcomes from the questionnaire have indicated that the majority of Bahraini investors (35 out of 50) would sell stock B, which has decreased in price, to have money in hand to pay other commitments. Therefore, this shows that Bahraini investors have learned from the huge losses that occurred during the crisis, and tend to sell their losers, expecting them to be worth less in the future.

Herd behaviour could be used to explain the magnitude of losses for Bahrain investors during this period. A majority of the Bahraini investors stated that they would not follow their family and friends into investment decisions after the crisis.

Thirty-three of the fifty Bahraini investors polled said they would not follow their friends and families into investment decisions after the crisis .All of the interviewees supported this finding: "they are not listening to their friends and families for a while" (Interviewee 3); "they have turned from investors that used to be followers to more cautious investors who research any security before putting their money into it" (Interviewee 1).

FINDINGS AND CONCLUSIONS

Findings reveal that in pre-crisis period, most Bahraini investors were affected by representativeness in considering company growth, historical growth of an investment, and dividend yield as indicators for future growth; these led to errors. But results also shown that after the crisis, there has been a great change in the degree of dependence on historical growth. However they are still linking company growth with stock growth; this may cause future losses. With regard to the variable overconfidence, findings reveal that before the crisis, overconfidence affected most Bahraini investors due to the influence of different types of media on their decisions. But during the post crisis period, investor overconfidence has decreased. Addressed to the third research question, the finding of this study indicated that investors were influenced by loss aversion before the crisis, and is more loss averse after the crisis. On the other hand they save more cash for liquidity purposes post-crisis than they did pre-crisis.

Findings indicate that investors are affected by the regret emotion through the disposition effect before the crisis. Results from the questionnaires agree that investors have changed this behavior and are more inclined towards the opposite behavior after the crisis. Study findings also reveal that, **i**nvestors were highly influenced by family and friends in investment decision making before the crisis, this caused huge losses. They have now learned a lesson, as the questionnaires revealed that they are not following the herd at the present.

Test of hypothesis reveal that, there is no relationship between the internet effect and overconfidence after the 2007-2008 crisis, however it was positive for the crisis period. While a positive relationship between regret and herd behavior was observed before the crisis, there was no association between them both after the crisis.

This study illustrated the errors that influenced Bahraini investors before the crisis, and the changes in behaviors as a result of the lessons learned after the crisis. Taking these factors into consideration could help stakeholders, governments, and financial institutions. Since the area of behavioral finance continues to grow so further research is possible. A study of socioeconomic factors and physiological factors affecting Bahraini investors would give more accurate results. This study has another important limitation, that this study was confined to only Bahrain investors. Therefore, further studies can be conducted among other investors as well.

REFERENCES

Ackert, L. F., & Deaves, R. (2010).*Behavioral* Finance: Psychology, Decision-Making, and Markets. Mason: South-Western Cengage Learning

Akerloff, G. A., & Shiller, R. J. (2009). Animal Spirits: How Human Psychology Drives the Economy and Why it Matters for Global Capitalism. Princeton and Oxford: Princeton University Press

Al-Ajmi, J. Y. (2008). 'Risk Toerance of Individual Investors in an Emerging Market', Journal of Finance and Economics, (17), pp. 1-23

Bahrain Economic Development Board (2011). Economic Vision 2030. [Online]. Available at: http://www.bahrainedb.com/economic-vision.aspx, Retrieved March 2013.

Baker, H. K., & Nofsinger, J. R. (2002). 'Psychological Biases of Investors ', Financial Services Review, 11, pp. 97-116

Barberis, N., & Thaler, R. (2003). 'Chapter 18 A Survey of Behavioral Finance', Handbook of the Economics of Finance, 1 (2), pp. 1053-1128

Barberis, N. (2010). Psychology and the Financial Crisis of 2008. [Online]. Available at: http://badger.som.yale.edu/faculty/ncb25/cp9.pdf , Retrieved Janauary 27, 2013.

Beltratti, A. (2004). Behavioural Finance and Speculative Bubble. Milano: Universita Commerciale Luigi Bocconi.

Bodie, Z., Kane, A. & Marcus, A. (2008) Investments 7th edn. New York: Mc-Graw Hill.

Cohen, D. (2001). Fear, Greed and Panic: the Psychology of the Stock Market. New York: John Wiley & Sons Ltd.

Elton, E. J., Gruber, M. J., Brown, S. J., & Goetzmann, W. N. (2007). Modern Portfolio Theory and Investment Analysis. 7th edn. New York: John Wiley & Sons, INC.

Fama, E. F. (1998). 'Journal of Financial Economics', Market Effieciency, Long-Term Returns, and Behavioral Finance, 49 (3), pp. 283-306.

Fisher, K. L., & Statman, M. (2000). 'Cognitive Biases in Market Forecasts', The Journal of Portfolio Management, pp. 72-81.

Forbes, W. (2009). Behavioural Finance. West Sussex: John Wiley & Sons Ltd

Formlet, H. (2001). 'Behavioral Finance - Theoritical and Practical Application ', Business Economics, 36 (3), pp. 63-69

Gilvoch, T., Griffin, D., & Khaneman, D. (2002). Heuristics and Biases: the Psychology of Intuitive Judgement. Cambridge: Cambridge University Press.

Gitman, L.J., & Joehnk, M.D. (2008). Fundamentals of Investing 11th edn. Boston: Pearson International Edition.

Global Investment House (2007). Bahrain Banking Sector Report. [Online]. Available at: http://www.globalinv.net/research/Bahrain-Banking-062007.pdf, Retrieved January 21, 2013.

Grinblatt, M., & Keloharju, M. (2000). 'The investment behavior and performance of various investor types: a study of Finland's unique data set', Journal of Financial Economics, 55 (1), pp. 43-67

Heath, C., Larrick, R. P., & Wu, G. (1999). 'Goals as Reference Points', Cognitive Psychology, 38 (1), pp. 79–109.

Hirshleifer, D., & Teoh, S. H. (2003). 'Herd Behaviour and Cascading in Capital Markets: a Review and Synthesis', European Financial Management, 9, pp. 25–66.

Kahneman, D., & Tversky, A. (1979). 'Prospect Theory: An Analysis of Decision under Risk ', Econometrica, 47 (2), pp. 263-292.

Lakonishok, J., Shleifer, A., & Vishny, R. (1994). 'Contrarian Investment, Extrapolation, and Risk ', Journal of Finance, 49 (5), pp. 1541-1578.

Linter, G. (1998). 'Behavioral Finance: Why Investors Make Bad Decisions ', The Planner, 13 (1), pp. 7-8

Lopes, L. L. (1987). 'Between Hope and Fear: The Psychology of Risk Advances in Experimental Social Psychology20, pp. 255-295

Lundeburg, M., Fox, P., & Punccohar, J. (1994). 'Highly Confident but Wrong: Gender Differences and Similarities in Confidence Judgements', Journal of Educational Psychology, 86 (1), pp. 114-121.

Michenaud, S., & Solnik, B. (2008). 'Applying regret theory to investment choices: Currency hedging decisions', Journal of International Money and Finance, 27 (5), pp. 677-694.

Mitchell, O., & Utkus, S. (2003). 'Lessons from Behavioral Finance for Retirement Plan Design', Working Paper No. 6 [Online]. Available at: http://fic.wharton.upenn.edu/fic/papers/03/0334.pdf, Retrieved December 2, 2013.

Nisbett, R. E. (1993). Rules of Reasoning. Hillsdale: Lawrence Erlbaum Inc.

Nofsinger, J. R. (2008). The Psychology of Investing. 3rd edn. Upper Saddle River: Pearson Education, pp.33 -79.

Odean, T. (1998). 'Are Investors Reluctant to Realize Their Losses?', The Journal of Finance, 53 (5), pp. 1775-1798.

Olsen, R. (1998). 'Behavioral Finance and its Implications for Stock Price Volatility ', Financial Analysts Journal, 54 (2), pp. 10-18

Ritter, J. R. (2003). 'Behavioral Finance ', Pacific-Basin Finance Journal, 11 (4), pp. 429-437.

Shefrin, H., & Statman, M. (1985). 'The Disposition to Sell Winners too Early and Ride Losers too Long: Theory and Evidence', The Journal of Finance, 40 (3), pp. 777-790.

Shefrin, H. (2000). Beyond Greed and Fear : Understanding Behavioral Finance and the Psychology of Investing. New York: Oxford University Press.

Shefrin, H. (2002). Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing. New York: Oxford University Press, p. 24

Shiller, R. (1995). 'Conversation, Information, and Herd Behaviour', American Economic Review, 85 (2), pp. 181-185.

Shiller, R. J. (2005). Irrational Exuberance. 2nd edn. Princeton: Princeton University Press, p.148.

Solvic, P. (1969). 'Analyzing the Expert Judgement: A Stusy of a Stockbroker's Decision Process', Journal of Applied Psychology, 53 (4), pp. 255-263.

Solvic, P. (1972). 'Psychological Study of Human Judgment: Implications for Investment Decision Making', Journal of Finance, 27 (4), pp. 779-799.

Statman, M. (1999). Behaviorial Finance: Past Battles and Future Engagements. [Online]. Available at: http://www.latrobefinancialmanagement.com/Research/Behavior_Finance/Behaviorial%2520Finance.pdf , Retrieved December 20, 2013.

Thaler, R. H. (2005). Advances in Behavioral Finance. 2nd edn. Princeton, Oxfordshire and New York Princeton University Press and Russell Sage Foundation

Tharp, V. K. (2007). Trade Your Way to Financial Freedom 2nd edn. New York The McGaw:Hill companies

Triantafyllopoulos, N. & Kandyla, T. (2010). 'Buyers' behaviour and the housing bubble in Greece', European Real Estate Society Conference 2010. Milan 23-26.06.2010. pp. 1-15.

Tversky, A., & Kahneman, D. (1974). 'Judgement under Uncertainty: Heuristics and Biases', Journal of Science, 185 (4157), pp. 1124-1131.

Tversky, A., & Kahneman, D. (1986). 'Rational Choice and the Framing of Decisions', The Journal of Business, 59 (4), pp. S251-S278.