Understanding Cognitive Dissonance-The Behavioural Finance Principle

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ABSTRACT

Behavioural Finance has been evolved due to the shortcomings of the traditional finance theory to predict and study the behaviour of individuals. Different concepts, theories and ideas have been added to the behavioural finance literature over time. Cognitive Dissonance theory is one of such concepts which is of much relevance in the study of investment behaviour of individuals. This paper tries to give a basic introduction of the concept of behavioural finance followed by the discussion of cognitive dissonance concept in a simplified way including the features and the ways to overcome the dissonance in investment decisions.

Keywords: Behavioural Finance, Cognitive Dissonance, investment behaviour.

INTRODUCTION

To know the meaning of behavioural finance the famous quotation of Albert Einstein i.e."Only two things are infinite, the universe and human stupidity, and I'm not sure about the former."[1]Seems to be much more relevant. Really the human mind is the greatest and it is also the worst in some cases. Before taking any investment decision every investor uses some technique for valuing the securities. Two mostly used techniques are fundamental and technical analysis. The former approach is based on the intrinsic or present value of future cash flows and the other is based on the past

[1] Karz. Gary, CFA, "Psychology & Behavioral Finance" available at www.Investorhome.com, accessed on 25th Feb, 2013.

behavior of prices. However in real practice investment decision making is not guided by tool i.e. fundamental analysis or technical analysis, but other qualitative factors. These qualitative factors covered by the emerging field of behavioral finance are the cognitive (mental) factors and emotional issues that impact the decision-making process of individuals, groups, and organizations. Behavioural finance contributes to better decision-making by investigating how various cognitive processes and emotional factors may hinder or contribute to optimal decision making in finance. Much of economic and financial theory is based on the notion that individuals act rationally and consider all available information in the decision-making process. However, researchers have uncovered a surprisingly large amount of evidence that this is frequently not the case. Lots of examples of irrational behavior and repeated errors in judgment have been documented in academic studies.

Behavioural Finance Principles and Its Implications:

As per the traditional financial theory, the decisions makers are assumed to be rational. In contrast, behavioural finance suggests that Investors financial decision-making are not driven only by the equilibrium models and they often proof to be irrational while making investment decisions. In other words as per the principles of behavioural finance human decisions are subject to several cognitive and emotional illusions. Such illusions are categorized into different concepts like loss aversion, herd behaviour, overconfidence, mental accounting etc.One of such illusions or in fact rightly considered as an important principle of behavioral finance is the cognitive dissonance theory.

OBJECTIVE OF THE STUDY

This study has been conducted mainly to simplify the concept of cognitive dissonance, which is one of the principles covered by the behavioural finance discipline with regard to study of investment behaviour of individuals. The paper is first discusses the meaning of cognitive dissonance and followed by the factors implying the presence of cognitive dissonance and then also showing some ways to overcome this dissonance in investment behaviour.

RESEARCH METHODOLOGY

The paper is mainly conceptual and descriptive in nature and it is based on the studies available over internet based sources and various other related books and journals.

DISCUSSION

The word "cognition" implies simply the knowledge. However in a broader sense it implies the whole process of acquiring knowledge including the analysis of the acquired knowledge and to apply that acquired knowledge to the new information to form new knowledge. According to Psychology there are three types of learning, viz. cognitive, conative and affective. The cognitive learning is the process of learning by different mental activities like memorizing, thinking, analyzing, choosing, formation of attitudes or beliefs etc. Thus cognitive method is considered as one of the methods of acquiring knowledge by a human being. However we can say that the word "cognitive" does not necessarily mean to acquire knowledge or the process of learning but also includes the whole mental process starting from acquiring knowledge to understanding the acquired knowledge, application of that knowledge in real life situations and also to analyse and interpreting new information in the light of that knowledge to form new knowledge base. Again the other term "Dissonance" means an inconsistency or disharmony. It arises due to conflict between two points which we may say as the standard and the actual. The standard is the already having beliefs or knowledge (cognition) and when one has to do something inconsistent with those standard set the discomfort arises and this is termed as the cognitive dissonance. It is to be noted that cognitive dissonance is nothing but a feeling of discomfort or disharmony resulting from the contradiction with the set beliefs or attitudes.

For example, one may have a belief that his Head is a rude and very ill-mannered person and he would not sanction a leave at any cost but he is in urgent need of a leave and he has to apply for that. Here the belief is that the head would not sanction the leave and dissonance arises as in spite of that he has to go for applying for the leave. It is to be noted that as an individual everyone always tries to reduce this dissonance or discomfort.

Another example is of a diabetic patient whom the doctor prescribed to go to his office regularly by walk as a part of his physical exercise. But on a day with heavy rain he preferred to go by his car. This causes a feeling of discomfort due to his knowledge that physical activity is an important element to control diabetes and he has not performed it on that very day.

Features of Cognitive dissonance:

Mental State: The cognitive dissonance represents a state of the mind resulting from a particular decision taken against the beliefs or attitudes. Dissonance or discomfort is a mental tension caused by conflicting situations.

Based on knowledge*:* Gathering of knowledge and then the formation of beliefs or attitudes etc. from that knowledge is the basis of cognitive dissonance. The human beings develop different beliefs on the basis of different methods of learning. Cognitive dissonance is the discomfort which is caused by such knowledge or belief. When someone has to do such an activity which as per his knowledge he doesn't think to be appropriate, he falls into the trap of cognitive dissonance.

Value of decisions: Another important feature of cognitive dissonance is that it varies according to the value or impact of decisions or the degree of inconsistency between the belief and the behaviour. For a decision which has a deeper impact or more importance in terms of value the cognitive dissonance will also be more. Thus there is a direct relationship between impact of decision and the level of dissonance.

Subjective Measurement: Cognitive dissonance is a psychological phenomena and it is not physically observable. As such the measurement of cognitive dissonance by using different methods like Intelligence Quotient (IQ) etc. seems to some extent subjective in nature.

Reduction of dissonance: Everyone always tries to reduce the dissonance arising from his decisions/ behaviour and feels comfortable when there exists a consistency between the behavior and the beliefs or opinions. The dissonance can be reduced by any of the three methods viz.changing the belief, changing the behaviour or changing the perception about the behavior.

Theory of Cognitive Dissonance:

Leon Festinger, an American Social Psychologist, developed the theory of cognitive dissonance in 1957 when he was in Stanford University. The theory proved to be a very useful contribution to the field of social psychology in the later years. If stated in his own words "The theory of Dissonance holds that

1. There may exist dissonant or "nonfitting" relations among cognitive elements.

2. The existence of dissonance gives rise to pressures to reduce the dissonance and avoid increases in dissonance.

3. Manifestations of the operation of these pressures include behaviour changes, changes of cognition and circumspect exposure to new information and opinions."[2]

Festinger pointed out that there were different cognitive elements present in human beings and they might face inconsistencies sometimes between those cognitive elements and that created a dissonance or discomfort. When someone faces such discomfort he always tries to reduce such dissonance by adopting either of three ways as pointed out by Festinger. Following diagram shows the arousal of dissonance and how one tries to overcome such an unpleasant condition (Dissonance).

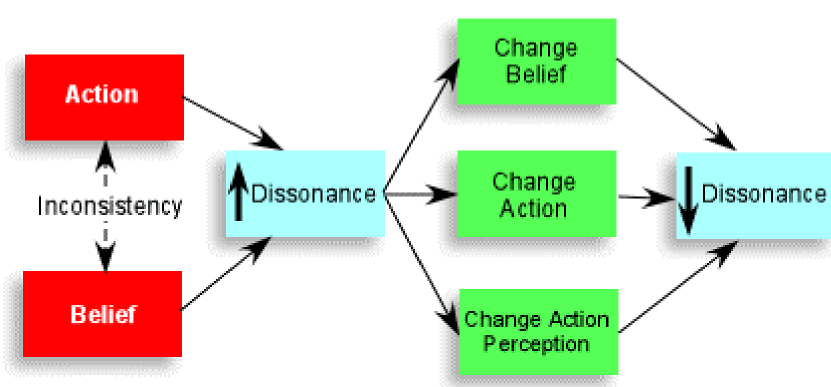

Figure 1. Cognitive Dissonance Theory[3]

The theory of cognitive dissonance has got some assumptions as stated below:

1. ***Presence of cognitive elements***: According to Festinger every human being bears some cognitive elements. Cognitive elements imply a belief, an attitude, an opinion, etc. which are the effects of interaction with different pieces of knowledge or experiences at various situations. Simply stated these are the elements which are gradually created by knowledge and experiences.
2. ***Presence of Inconsistencies***: The cognitive elements present in human beings often clash with each other in practical life. Frequently one has to knowingl y make a decision or has to behave in such a

[2] Festinger.Leon. " A Theory of Cognitive Dissonance", Pg. 31, Stanford University Press.

[3] "Cognitive Dissonance Theory "available at http://www.simplypsychology.org/cognitive-dissonance.html, accessed on 23 rd Feb, 2013.

way which is not consistent with his cognition. Such inconsistency results in to an unpleasant state of mind or a mental tension which is called dissonance or in other words "the cognitive dissonance"

3. ***Magnitude of Dissonance**:* The magnitude or level of dissonance will be based on the importance of the decision. As the importance will be higher so will be the level of dissonance too and vice-versa. According to Festinger another important determinant of post-decision dissonance is that the attractiveness of the unchosen alternative.

4. ***Minimising the level of dissonance**:* When the dissonance arises everyone tries to minimize it to the least possible. He wants to get rid of this unpleasant state of mind by adopting different ways and wants to be in a consistent stage between the cognition and the behaviour.

Situations signifying Cognitive Dissonance in Behaviour:

Almost all the people faces with the situation of cognitive dissonance every now and then and some people face it regularly. The factors which signifies the presence of cognitive dissonance differs from one person to the other. However some of the signs of this unpleasant behaviour are stated below.

1. ***Ignores new information:*** The persons with cognitive dissonance always try to overlook new information which is contradictory to their beliefs or behavior. Their psychology doesn't want to degrade their value of beliefs or decisions already made in the light of the new information.

2. ***Overconfidence in own decisions:*** The cognitive dissonance may be seen from overconfidence in own past decisions. They are very confident about their decisions and don't want to prove them wrong. An example of such situation is that some investors don't like to sell their holdings even if they are not performing well for a long time. They just try to convince themselves that they have not made a wrong investment decision although the latest information is showing that clearly

3. ***Biased interpretation of news:*** The persons interpret any news about their decisions in a biased way. They just try to see that side of the news which supports their behaviour and although they have got the other side too, they just give less importance to that part. In simple words they like to accept or hear that news which is consonant with their beliefs or behaviours or decisions. For example the financial indicators of a mutual fund is showing that SBI mutual fund has performed well in past few months but this trend is not supposed to continue in coming years. In this case the SBI MF investors give more importance to the good performance of the fund in past few months and less stress on its future forecast.

Ways to overcome dissonance:

According to Festinger's theory when one tries to reduce the dissonance he may adopt any of the following ways as shown in the above diagram-

1. ***Change of cognitive elements***: The simplest way to avoid dissonance is to change the cognitive elements like beliefs, attitudes, behaviour or opinion etc. to bring about consistency between any two or more of them. For example, A diabetic patient in a day has gone to his office by bus in spite of his doctors' recommendations to go by walk. This has caused a dissonance that he has not fulfilled his physical activity routine which may cause injury to his health. To avoid this dissonance he may change his belief that it is not necessary to comply with the routine everyday and it will not cause any damage even if he misses it one or two days. However the problem lies is that it is not so easy to change a long holding belief and it is the toughest work if the belief is very true.

2. ***Change of Behaviour/Action****:* Another way to resolve the dissonance is to change the behaviour. In other words he may decide that although once made he will not repeat the action/behaviour again in the forthcoming days.

3. ***Change perception of action/ Acquire new information****:* Another way to reduce dissonance is rationalizing our action/behaviour by

adding new information to our cognitions or by modifying our cognitions. For example if it is revealed that three days a week of physical activity is sufficient to control diabetes then to go by bus at times will not cause any dissonance to the individual. This new piece of information would change his attitude towards the behaviour and thereby help to reduce the dissonance.

CONCLUSION

However it is to be noted that the theory although asserts that the individuals always try to minimize the dissonance by different ways but it is not sure that they will always get success in this. Everyone definitely tries to do so but it is not always easy to reduce the dissonance to the desired level or to bring about complete consonance and in case of fundamental and important decisions there always lies certain amount of dissonance in spite of all tries has been made.

FUTURE SCOPES OF STUDY

Following further studies may be put forwarded in line with this paper:

1) To study the impact of cognitive dissonance in investment behaviour of individuals in India.
2) To study the extent of presence of cognitive dissonance in investment behaviour.
3) To study about the other behavioural finance principles, viz. herd behaviour, loss aversion behaviour, adaptive attitude etc.

BIBLIOGRAPHY:

Books:

1. Michael M. Pompian, "Behavioral Finance and Wealth Management" (2006), published by John Wiley & Sons, Inc., Hoboken, New Jersey.
2. Frank Reilly, Keith Brown, "Investment Analysis & Portfolio Management", 7th Edition.
3. Zvi Bodie, Alex Kane, Alan, J. Marcus. " Essentials of Investment", (2008).
4. Sudhindra Bhat, "Security Analysis and Portfolio Management"(2011), published by Excel Books, New Delhi.
5. S. Kelvin, "Security Analysis and Portfolio Management" (2011) Published by PHI Learning Pvt. Ltd.

6. V.K. Bhalla, "Investment Management" (2009), published by S. Chand & Co. Ltd.
7. P.Pandian, "Security Analysis and Portfolio Management" (2008), published by Vikas Publishing House Ltd.

Websites:

1. "Cognitive Dissonance Theory "available at http://www.simplypsychology.org/cognitive-dissonance.html, accessed on 23 rd Feb, 2013.
2. "Behavioral Finance: Key Concepts - Herd Behavior", available at http://www.investopedia.com/university/behavioral_finance/behavioral8.asp, accessed on 27th july, 2012.
3. Campenhout .Geert Van, Jan-Francies Verhestraeten, "Herding Behavior among Financial Analysts: a literature review"HUB research paper no. 2010/39, 2010 available at https://lirias.hubrussel.be/bitstream/123456789/4456/1/10HRP39.pdf. accessed on 15th march, 2013.
4. Banerjee, Abhijit V. "A Simple Model of Herd Behaviour",The Quarterly Journal of Economics, Vol. CVII,Issue 3, available at http://snap.stanford.edu/class/cs224w-readings/banerjee92herd.pdf , accessed on March 20, 2013.
5. Hirshleifer.David, Siew Hong Teoh. "Herd Behaviour and Cascading in Capital Markets: A Review and Synthesis."MPRA paper no. 5186 available at http://mpra.ub.uni-muenchen.de/5186/1/MPRA_paper_5186.pdf, accessed on June 06, 2013.
6. Kahneman.D, Tversky.A " Prospect Theory: An Analysis of Decision under Risk" , Econometrica, Vol.47, Issue 2 avaiable at http://www.jstor.org , accessed on 12th July,2013.
7. Tversky,A. "Loss Aversion in Riskless Choice: A Reference-Dependent Model" The Quarterly Journal of Economics,Nov.1991, available at www2.uah.es/ accessed on 12th Aug,2013.
8. Thaler, R. H.et al. (1997). "The effect of myopia and loss aversion on risk taking: An experimental test.", available at http://faculty.chicagobooth.edu/richard.thaler/research/pdf. ,accessed on 17th August, 2013.
9. Scott Rick, "Losses, gains, and brains: Neuroeconomics can help to answer open questions about loss aversion", Journal of Consumer Psychology, 21 (2011) 453–463, available at www.sciencedirect.com, accessed on 15th August, 2013.
10. Sabrina M. Tom, et al . "Losses loom larger than gains in the brain: Neural

loss aversion predicts behavioral loss aversion" available at http://w4.stern.nyu.edu/emplibrary/TomEtAl-LossAversionOnBrain(submitted).pdf, accessed on 16th Aug.2013.

11. M. Kannadhasan, " Role of Behavioural Finance in Investment Decisions", available at http://dl4a.org/uploads/pdf/52.pdf , accessed on 12th August, 2013.

Journals:

1. Patro. Archana ,. Kanagaraj . Prof. A (2012), "Exploring the Herding Behaviour in Indian Mutual Fund Industry" ,Asian Journal of Finance & Accounting (ISSN 1946-052X), Vol.4 No.1, available at www.macrothink.org/ajfa , accessed on 23rd May, 2013.

2. Das, Bhagaban *et al.* (2008) "Mutual Fund vs Life Insurance: Behavioral Analysis of Retail Investors" ,International Journal of Business and management [ISSN (online)-1833-8119], Vol.3 No.10, available at http://www.ccsenet.org/journal/index.php/ijbm , accessed on 12 June, 2013.

3. Subramanya P. R. *et al.* (2013) "Investors Attitude towards Mutual Fund (Special Reference to Chikkamagalore District, Karnataka State, India)" ,International Journal of Management & Business Studies [ISSN: 2230-9519 (Online)], Vol. 3, Issue 1, available at w w w. i jmb s . c om , accessed on 04th July, 2013.

4. Chaudhary , Amar Kumar (2013) "IMPACT OF BEHAVIORAL FINANCE IN INVESTMENT DECISIONS AND STRATEGIES – A FRESH APPROACH" International journal of management Research & Business Strategy,(***ISSN 2319-345X***) Vol.2No.2,available at ***www.ijmrbs.com , accessed on 21st july,2013.***

5. Roy, Swapan Kumar (2011) "Understanding Behavioural Finance" The Management Accountant, Vol. 46 No.10.

6. Banerjee, Arindam(2011) "Application of Behavioural Finance in Investment Decisions : An Overview" The Management Accountant, Vol. 46 No.10.