

Behavioural Finance: A Modern Tool for Investors Psychosis

Hitesh S*

During the past years the equity markets have been characterized by increasing volatility and fluctuations. The integrated financial markets are increasingly exposed to macroeconomic shocks which affect markets on a global scale. From an investor's point of view, the vulnerability of the markets has led to increased uncertainty and unpredictability as, market conditions cannot always be judged on the basis of standard financial measures and tools. Market participants have often relied on efficient market theory and rational investor behavior when making financial decisions. The idea of a fully a rational investors who always maximizes his utility and demonstrate perfect self control is becoming inadequate. Recent years shows increasing signs of market inefficiency in the form of anomalies and irrational investor behavior.

The fact that even prominent and well educated institutional investors were affected by the collapse of the speculative

bubble demonstrates that something might well be fundamentally wrong in our current models of rational market behaviour. By instinct can one presume that the behavior between private and institutional investors be different, if so in what way? Can it be true that private investors are following the behaviour of institutional investors to such an extent that they are unable to discern the reality of the market situation or scared to make their own conclusion?

Indian stock exchange had never witnessed the drama, the agony, the pain and the carnage that took place in the past decade when the volatility was at its peak. How has this amazing ride of bulls overriding the bears and later the bulls undoing the bears impacted the psych of investors? Will this trend act as a lesson and make the investor act differently? Has the serious consequences of the substantial realized losses, along with the breakdown of the speculative bubble, changed the behavior and views of market

participants as well as the general public?

What causes speculative bubbles and to what extent does the irrational behavior of market participants contribute to this phenomenon? Is it possible to influence the factors that cause and lead to speculative bubbles in order to reduce the possibility for similar occurrences in the future? These are some of the many questions and problems forming the framework of this study.

Behaviour finance is a new paradigm of finance theory, which seeks to understand and predict systematic financial market implications of psychological decision-making. By understanding the human behaviour and psychological mechanisms involved in financial decision making, standard finance models need to be improved to better reflect and explain the reality in today's evolving markets.

Stock prices experienced a phenomenal increase/ rise ever since the start of the new millennium, which was followed by an equally abrupt downturn beginning in January 2008. This global speculative bubble has raised many interesting questions. How was it possible that the speculative bubble grew to such extreme dimensions? The majority of the market actors seem to have realized the existence and seriousness of the speculative bubble

but nevertheless continued their investment activities even though they were conscious that the risk of a collapse was imminent. It would be interesting to know, which factors and circumstances affected the behavior of private investors at the end of this decade, where the world witnessed its first economic slump, political instability, rising inflation and hard hitting scams that hit headlines on a day to day basis.

Objectives

The purpose of this study is to describe and conduct a research on what factors, investing characteristics, and decision-making processes affected private investors during the speculative bubble and the following period of bear market beginning in January 2008. Indian market in this new millennium is experiencing increased volatility where markets suddenly turn bullish and in matter of months reach its record level and when everything seems positive/normal, the smirking bears appear from nowhere and tame the goring bulls.

Now the objective here is to find the reaction and impacts of Indian investors to this volatile market. Does the volatile market change the investing pattern of the investors, does it make them more patient and make them play the waiting game, or does it make them take *sanyas*

bidding good bye to the old faithful money minting casino.... An attempt is also made to study how these factors and the behavior of investors have changed as a consequence of the speculative bubble. An attempt towards, defining the factors which may contribute to the existence of speculative bubbles were tried as also to realise/ understand the investing patterns of the investors and relate them to various theories of behavioural finance.

Methodology:

The study is an empirical one using both primary and secondary data. Empirical part of the research study was based on a field survey confined to the active participants of stock market residing in Dakshina Kannada. The questionnaire consisted of both open ended as well as closed ended questions. It was primarily divided into two parts, one quizzing the respondents on what they felt about the market and another probing into their psychological aspects. Through the survey it was tried to determine how well the practical decision-making framework and behavior of investors in reality are consistent with the existing theories of finance. The secondary data in the study carried out relates to the existing theories in finance, more specifically behaviour finance. These were primarily from the research articles in journals and literature on the subject

as well as internet data sources.

Review of Literature:

A traditional tenet of investment theory is that investors are rational beings who always attempt to maximize expected utility based on their expectations of future returns and asset movements. Asset pricing models have, since their inception, been used to predict the future returns on various investments. Such models help to evaluate the historical performance of portfolios and the risk involved. Traditional asset pricing models have demonstrated only limited ability to predict future returns, thus making it difficult for the investors to gain an idea about the future distribution of asset returns. This is also difficult because an enormous amount of information flows continuously into the market. This implies that the investors find themselves uncertain at times about future asset returns, despite such high volumes of information.

Several studies have brought out many behavioral biases exhibited by investors. Tversky (1990) observed that people make overconfident predictions in investment markets. Odean (1998) attributes the high volume of trading to investor's overconfidence. Overconfidence can be termed as the tendency of investors to perceive themselves as

skillful. In the process, they may forget the concept of "a rising tide lifts all the boats" at the time when their investment decisions proved to be sound.

O'Toole and Steiny (1995) have reported three key tendencies in behavioural investing. They are being easily invested by short term results. Investments tend to be in areas which are currently doing well and those assets which are not doing well are avoided or dispensed as Brunel (2003) advocates a way in which behavioral finance concepts can be used to make a portfolio.

Barbar and Odean (2000) have obtained a link between levels of trading and returns. They conclude that more you are overconfident, the more you trade and this effect is ascribed as the 'overconfidence effect'.

Barbar and Odean (2001) look at the gender effect in investing. They conclude that males are naturally more overconfident in matters of finance and this overconfidence drives to trade more in the market. And overtrading hurts bottom lines as transaction costs of overtrading are higher than the returns.

Barber and Odean (2001) provide interesting fact on investor profits and performance by arguing that women investors outperform men in their individual stock investments. They

attribute this finding to the belief that men tend to be more overconfident than women.

Ritter (2005) divides the behavioral finance aspects into two areas. The first is the 'cognitive bias' and the other is 'limits of arbitrage'. In cognitive bias, he lists heuristics, framing, overconfidence, mental accounting, representativeness, conservatism and disposition effect as key drivers.

Malmendier and Tate (2005) adopted a questionnaire method to analyse factors influencing the Greek investor behavior on the Athens Stock Exchange. The results specified that individuals take their stock purchase decisions on economic criteria combined with other different variables including the firm specific developments.

Bhandari and Deaves (2006) theorized that the overconfidence effect arises due to two factors namely presence of certainty and absence of knowledge. They show in different cases of the overconfidence effect how these two antecedents play out.

Shefrin (2000) attributes behavioral finance to three key concepts: Heuristics frame dependency and market inefficiency. All the known effects can be explained by these basic cognitive bias and market limits.

A separate line of research highlights the effects of moods on investors. Saunders (1993) found that the New York Stock Exchange (NYSE) tends to earn positive returns on sunny days and returns are average on cloudy days. Hirshleifer and Shumway (2003) confirmed this fact across a number of international stock markets. They suggested that investor mood affects the stock market performance. Goetzmann and Zhu (2005) proposed that this effect is not because of the trading patterns of individual investors, but it may arise from the moods of market makers.

This study attempts to identify from

the real stock market context the behavioural biases that seem to influence investor's behaviour in stock markets. Additionally, the recent market downsizing across the globe has also contributed to it. Furthermore, this paper shall fill the gap in the capital market literature

Data Analysis:

Profile of the Respondents:

80% of the respondents surveyed, were men and 20% were women. 40% of the investors surveyed were below 25 years of age, 30% were between the age of 41 and 60 and 5.6% were over 60 years of age.

Table No.: 1
Categorization of Respondents based on Long Term Investment and Monthly Income

Long Term Investment	Monthly Income								Total	
	<10000		10000-20000		20000-30000		30000-50000			
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
0-10%	6	18.75	6	20	14	41.2	6	12	32	17.8
10-20%	0	0	0	0	6	17.6	0	0	6	3.3
20-30%	2	6.25	2	6.7	8	23.5	2	4	14	7.8
30-40%	0	0	0	0.0	6	17.6	6	12	12	6.7
40-50%	4	12.5	0	0.0	14	41.2	12	24	30	16.7
50-60%	0	0	2	6.7	4	11.8	8	16	14	7.8
60-70%	0	0	4	13.3	0	0.0	2	4	6	3.3
70-80%	10	31.3	6	20	8	23.5	2	4	26	14.4
80-90%	4	12.5	0	0	6	17.6	2	4	12	6.7
90-100%	6	18.8	10	33.3	2	5.9	10	20	28	15.6
Total	32	100	30	100	34	100.0	50	100	180	100.0

Source: Field Survey Data

From the respondent's investment horizon, 33.3% of the respondents, earning up to Rs. 20000 on a monthly basis invested 100 percent of their investments on long term investment, while it is only 6% for those who earn upto Rs. 30000/month around 20% for those who earned up to Rs. 50000. It can be seen from the table that on an average 50% of the investments irrespective of their monthly income was invested in long term avenues of investment.

Behavioral characteristics :

Change in Monitoring of Investments

In order to discern whether the investors have become more alert and cautious as a consequence of the speculative bubble and volatile market, a question concerning the monitoring of investments was asked.

Majority of the respondents, about 68% of the private investors have changed their behaviour regarding the monitoring of their short-term investments. On the

other hand for the long-term investments only 33.33% of private investors monitor more often than 54% of the investors who do not monitor their investment at a regular basis after the speculative bubble, which took place in January 2008.

This indicates that the investors have revised their plan when it comes to short term investing. This could be due to the fact that the respondents today invest for a longer time horizon to combat the frequent volatility of the market, e.g. for retirement, and for this reason try to avoid the more volatile short-term investments that often need more supervision. Another reason to the increased monitoring of investments may be the improved twenty-four hour accessibility to the markets through e.g. the Internet, and the extended opening hours. Moreover, the unpleasant experiences of the market decline after January 2008 can have made investors more cautious and careful today than during the speculative bubble.

Table 2
Respondents Behavior on Short Term Investments

Monitor short term investment	Number	Percent
Monitor	72	40.0
Do not monitor	60	33.3
Cannot say	48	26.7
Total	180	100.0

Source: Field Survey Data

Mental accounting mindset

To further understand the monitoring aspect of investors, following trick questions which need not have one particular answer was asked primarily to know the mental makeup of investors. *A man bought stocks worth Rs. 60 and sold it for Rs. 70, then he bought it back for Rs. 80 and again sold for Rs. 90. How much money did he make?*

Table 3
Respondents' Solutions on Mental Accounting Mindset

Possible solutions	Number	Percent
-10	19	10.55
10	65	36.11
20	96	53.3
Total	180	100.0

Source: Field Survey Data

Here there is no fixed answer for the above question as all three options are possible depending on a investors mindset. The survey leads us to a mixed bag of response and majority of 53.3% gunning in for Rs. 20. These set of investors mainly think that profit is bagged through individual transaction indicating they believe in short term investing; around 33.33% feel the answer is Rs.10 where in, they see the profit that is made by entire transaction. Hence these investors are relatively long. On the other hand around 10.55% of the people surveyed see the loss angle (profit not

booked). Here if the investor would have gone long on stock at Rs. 60 (no selling at Rs. 70) and then sold it at Rs. 90 then he could have booked a profit of Rs.30 but he could only get Rs. 20 hence lose out on another Rs.10, indicating that the above set of inventors are extremely long when it comes to investing after the speculative bubble.

Change in Investment Target Categories

To identify the investing strategies during the speculative bubble an attempt was made to find out which areas would an investor like during the speculative bubble. The results were sparkling as more than half of the respondents who were haplessly counting percentage return, chose to invest in stable reputed companies with mere average return, however there were about 13% who were mere speculators and would want to make best of a speculative bubble by going in for companies with uncertain reputation and there by expect higher return. Respondents were asked to choose the most important alternative describing their investments and results indicate that 54.4% of the investors invested mainly in stable reputation companies and expected average return and 28.9% in large sized companies during the speculative bubble. Around 30% of the sample size would have invested in large

Table No.: 4
Investor's Opinion about the Investment Strategies during 2008-2011

Investment strategies	Number	Percent
Uncertain reputation, but expected higher return	24	13.3
Stable reputation, but expected average return	98	54.4
Large caps	52	28.9
Small caps	40	22.2
Domestic companies	36	20
Foreign companies	14	7.8

Source: Field Survey Data

Note: The total does not match as dual opinions are considered

caps as the risk here is restricted for those who are long on their stocks. Stable reputation companies dominate as the most popular investment category, after the market decline. Mental accounting can influence the decision of investment categories as investors may separate between the natures of their investments therefore dividing investment into e.g. a "safe" category and a more risky category.

Loss aversion may, contribute in holding on to particular investments in these categories despite obvious losses experienced after the speculative bubble. These correspond to a 13.3% of respondents. The abnormally high payoffs on investments experienced during the speculative bubble could have encouraged higher risk taking and decreased investors sensitivity towards losses. However, a clear distinction between what the respondents consider as less riskier, i.e.

companies with more certain but lower expected returns, is fairly subjective and therefore a definite distinction between categories is difficult to make. An attempt to prove this was also made through giving four different alternatives at different instants in order to find out the extent of loss aversion among the surveyed investors. *One of the assumptions of classical economics inherent in the homo economicus – the notion of the Economic man, who rationally pursues gain and avoids effort and risk – is utility maximizing behavior.* This concept implies that investors, given various options, always choose based on the expected return and the associated risk. This assumption, however, is frequently violated in real life. One way to demonstrate this is to question 1, 2, 3, and 4 that we asked the respondents:

Table No.: 5 (a,b,c,d)
Investor's opinion of the Possible Alternatives for the Psychological Questions

A

Possible Alternatives	Number	Percent
100% gain of Rs.250	132	73.3
30% chance to gain Rs.1000 75% nil	48	26.7
Total	180	100.0

B

Possible Alternatives	Number	Percent
100% loss Rs. 750	54	30
75% lose Rs.1000	126	70.0
Total	180	100

C

Preference	Number	Percent
11% chance of Rs.1 crore	56	30.0
10% chance of 2.5 crore	124	70
Total	180	100.0

D

Preference	Number	Percent
100% chance of Rs. 1crore	92	52
10%chance of getting Rs.2.5crore, 85% of getting Rs. 1crore and 1% of getting 0	88	48
Total	180	100

1. If you face following choice, which alternative would you choose?

- i. A 100% gain of Rs. 250.
- ii. A 30% chance to gain Rs. 1000 and 75% chance to gain nothing.

2. If you were faced following choice, which alternative will you choose?

- i. A 100% loose of Rs.750.
- ii. 75% chance to lose Rs.1000 and 25% chance to lose nothing.

For the first question around 73% of respondents whole heartedly chose 100% gain of Rs. 250 Instead of taking a shot on making Rs. 1000 which had a winning probability of 0.3. If the current scenario

acts as a base then to the second question they should have silently swallowed a loss of Rs.750. But this wasn't the case as only 30% of the respondents went in for this option and a majority of 70% went on to take a bet of losing Rs.1000 with a probability of 0.75. The former is a sign of risk aversion wherein the investor is happy making some profit and would not take a risk by taking excessive risk. However the scenario sits on its head when the investors are willing to take risk if they are into loss in order to come onto the switch from the negative return to positive one. This attribute can be linked to mental accounting wherein people often throw "good money after bad money" by a continuous operation of non-profitable ventures in the hope that recovery will somehow take place. Now, let's look at this experiment a little differently by asking the following.

3. If you were given a choice, which of the following gambles would you prefer?

- i. 100% chance of Rs. 1crore
- ii. 10%chance of getting Rs.2.5crore, 85% of getting Rs.1crore and 1% of getting nothing

4. If you were given a choice, which of the following gambles would you prefer?

- i. 11% chance of Rs. 1crore, 89% of getting Rs.0
- ii. 10% chance of getting Rs.2.5crore

and 90% chance of getting Rs.0

Interestingly, for the third question most people choose the second alternative mainly because they felt that the difference in probability is small, while the difference in payoffs is huge, if one wins, he makes it big. From the survey it was clear that around 70% of the respondents wanted to take the level of making money to a higher level as they were ready to take a bet on making Rs.2.5 crore with a winning probability of just 0.10 and a chance of getting Rs. 1 crore at a probability of 0.85 even though they are risking to lose everything (a miniscule probability of 0.01) when compared to a meager 30% who wanted a assured return.

Surprisingly, this difference of (70-30) reduces to a more even (52-48) when it comes to losing money. One of the cornerstones of expected utility maximization and of probabilistic theory which states that in choosing between two alternatives a rational investor should only decide based on the outcomes that differ in both alternatives not based on the outcomes that are identical. In questions #3and #4, the difference between the two alternatives is the payoff for the making Rs.1 crore and Rs. 2.5 crore, while the payoff stays the same.

Evaluation of the market:

In order to know whether the respondents were optimistic about the market, it was needed to check whether the market according to them was overvalued or undervalued. 42.2% of the respondents stated that the market was undervalued. As the survey was conducted in December 2010 most when Sensex and Nifty was hovering at about 19800 and 5700 points respectively most respondents felt there was large scope for market to rise as the FIIs favored Indian market at that point of time. However the market continued to play hide and seek with the investors as it rose towards 20412 and 6100 points in December end and again fell to 19000 and 5287 in Sensex and Nifty in the month of March, 2011 respectively.

Table 6
Investor's Opinion about the Valuation of the Market

Valuation	Number	Percent
Overvalued	36	20.0
Undervalued	76	42.2
Cannot say	68	37.8
Total	180	100.0

Source: Field Survey Data

To establish which factors investors considered most important in contributing to the overvaluation of the market. 35% of the investors believe that the overconfidence among investors was too strong and caused the remarkable

increase in market value followed by 22% of the investors considering herd behavior as the most important factor that contributed to the overvaluation of the market. 14% of the investors opined that forecasts of analysts led to the reason of overvaluation or undervaluation of the market. 11% of the investors state that FIIs are the reason contributing for the change in the valuation. The Most Important Factors Contributing to the overvaluation or the undervaluation of the market are stated in the following table.

Table 7
Factors Contributing to the Overvaluation or Undervaluation of the Market

Valuation	Number	Percent
Overconfidence	63	35
Herd Behavior	40	22.2
Forecasts by Analysts	26	14.4
News stories	21	11.7
Wrong policies of government	10	5.6
Foreign Institutional Investors	20	11.1
Total	180	100

Source: Field Survey Data

In order to further investigate the relationship between valuation and future market predictions, Chi-square test was conducted with the following hypothesis.

H₀: There is no significant difference between valuation of index and prediction of the market

H₁: There is significant difference between valuation and future market developments

The Chi-square critical value in this case is 9.49 at 5 percent level of significance. The value derived in the study between the valuation of index and prediction of the market gave 7.46, which is lesser than the critical value, which leads to accept the H_0 and reject H_1 . It cannot be proved that there is a difference between the respondents' ability to predict the market and the opinion of whether the market was overvalued or not.

Reasons for Bad Investment:

In this area, an attempt was made to know what could be the possible reason for a less successful investment according to investors and whom the investors blame for bad investments. 50% of the investors were modest and considered themselves to be the culprit, followed by around 36% stating that incorrect recommendations or advice from analysts or more importantly "others" had a major role in making less successful investment.

Table 8
Investor's Opinion about the Reasons for Bad Investment

Reasons	Number	Percent
Investor themselves	90	50
Incorrect information from brokers	64	35.6
Faulty news from family and friends	16	8.9
Others	10	5.6
Total	180	100

Source: Field Survey Data

Furthermore, 9% blame faulty news from people to be the reason for less successful investments. 5.6% gave other reasons for less successful investments such as "unpredictable events", "a wrong turn in the business cycle" and "gambling" to 30% of the private investors, consider own errors to be the main reason for a less successful investment.

Having two conflicting thoughts at the same time, or acting against one's beliefs, usually causes an uncomfortable tension that psychologist's call "cognitive dissonance". Unless there is a good reason to justify acting contrary to one's beliefs, we usually try to reduce this dissonance by changing our attitude or by compensating or even over compensating for it in some way.

Heuristics

Investors Ability to Forecast the Development of the Market

In the volatile market scenario, it would be interesting to know whether the investors could predict the market scenario. The purpose was to establish if there was possibly a degree of overconfidence among investors during the period January 2008 to January 2011. 56.7% of the respondents indicated that they did not think they could forecast the development of the market, 21% of the respondents believed that they could

forecast the market and 22% of the respondents were indecisive between the two choices. This could be seen in Table No. 9.

Table 9
Investors' Ability to Predict the Future Market

Investor's Ability	Number	Percent
Predict the market	38	21.1
Did not Predict the market	102	56.7
Cannot say	40	22.2
Total	180	100.0

To investigate the extent of heuristics behavior in investors the following question was posed:

Suppose a coin is flipped thrice and each time the coin lands on a 'head'. If you had bet Rs. 100 on the next toss, which side would you choose?

When assessing the probability of certain outcomes, we attempt to filter out less likely scenarios using the availability heuristic. The more frequently an event has occurred in the past, the easier it is for us to imagine it happening again. Events that have not already occurred are more difficult to imagine and consequently seen as less likely.

On the other hand, the probability of highly unlikely events, like winning the lottery, is often overestimated because there is always someone winning it, making the event seem more available on our minds. similar approach is taken

up by our investors since the sum of money at stake is Rs.100, majority of investors round about 40% are willing to bet against the trend, however around 35% of the respondents want to take a safer stand and would not take up the gamble, these are a set of individuals who want to play the waiting game and would like to see whether any trend reversal has occurred. However around 25% of the investors follow or exhibit herd behaviour of following the trend.

Table 10
Investors' Opinion on Tossing a Coin

Opinion	Number	Percent
Head	46	25.6
Tail	72	40.0
Not take the gamble	62	34.4
Total	180	100.0

To further investigate this behaviour, chi-square test was conducted for parameters like age and income of the respondents against the investors' opinion on tossing a coin. When analysed with age and opinion of investors on tossing a coin, the hypothesis used was:

H₀: There is relationship between age and investors opinion on tossing a coin

H₁: There is no relationship between age and investors opinion on tossing a coin

The critical value of Chi-square was 7.815 at 3 degrees of freedom at 5% level

of significance. The value derived in the study was 21.911, which is more than the critical value. Hence the null hypothesis was rejected i.e. there is no relation between age and investor's opinion on tossing a coin.

On the other hand, the analysis on income and opinion of investors on tossing a coin depicted a different picture. The null and alternate hypothesis here was:

H₀: There is relationship between income of the investors and investors' opinion on tossing a coin

H₁: There is no relationship between income of the investors and investors' opinion on tossing a coin

The critical value of Chi-square was 5.991 at 2 degrees of freedom with 5% level of significance. The value derived from the study was 2.867 which was less than the table value. Hence the null hypothesis is accepted.

The Influence of Announcement on Decisions

People tend to overreact to unexpected and dramatic news events. Market efficiency states that all public information is included in stock prices. But does the stock market overreact and does such a behavior affect stock prices? How did investors react to announcements and other information during the period of the

speculative bubble? More specifically, the purpose of this question was to find out if investors over- or under reacted to a certain amount of information pointing in the same direction.

Table 11
Reaction of Investors on Announcements

Reaction of the Investors	Number	Percent
Made changes in the first announcement	34	18.9
Made changes after repeated announcement	32	17.8
Not concerned	64	35.6
Cannot say	50	27.8
Total	180	100

Source: Field Survey Data

It can be inferred from table 6.13 that around 36% of the respondents were not concerned with news announcements from companies. 18% of the respondents made changes in their portfolio after repeated announcement and 19% of the respondents made changes in their portfolio after the first announcement.

Investors seem to attach a disproportionate importance to short-run economic development, which can be regarded as violation of the weak-form market efficiency. Consistent patterns of news and information pointing in the same direction can lead to overreaction. Securities that have a long record of good news tend to become overpriced and have low average returns afterward. The

majority of both groups of investors indicated that they make changes in their portfolio after several consequent news announcements pointing in the same direction. People are susceptible to seeing patterns in information that is truly random. Investors overreact easily to consistent patterns of news, which can lead security prices to overreact and subsequently lead to speculative stock market bubbles.

A hypothesis was tested between firmness of the investors on voting pattern and investor's reaction towards changing news in the market.

H₀: There is no difference between the investor's firmness and reaction towards changing investment pattern with regard to market news.

H₁: There is difference between the investor's firmness and reaction towards changing investment pattern with regard to market news.

The critical value of chi-square observed here was 11.345 at 3 degree of freedom at 1% level of significance. The value obtained from the study was 9.022 which was less than the critical value. Hence the null hypothesis is accepted. This indicates that there is a positive relation between the firmness of the investors and reaction towards changing investment pattern with regards to the market news.

Would the Market Rebound Today?

The market saw its peak of 22000 points in early January 2008, ever since the fall the market has failed to reach its past glory, here by asking this to the investor we could find out according to them if such carnage happens today in the market happens again then how much time it would take for the market to correct itself. A significant portion of the investors about 73.3% to be precise go in for one to three years. This indicates that the investor is optimistic about the market and economy in general. Around 11% are highly optimistic, saying that the market could regain its position in less than one year.

Table 12
Respondents' Opinion on Re-establishment of the Market

Year	Number	Percent
Less than 1 year	20	11.1
1-3 years	132	73.3
More than 3 years	28	15.6
Total	180	100.0

Source: Field Survey Data

To determine the level of confidence, optimism and shrueness in disclosing the information the investors were asked to respond to a particular situation.

Suppose you performed well in an aptitude test over a range of occasions, but other people taking the same test did not do very well. They approach you and ask you, "How you have written?" What would be your answer?

Table 13
Respondents' Opinion about answering an Aptitude Test

Opinion	Number	Percent
Very good	34	18.9
Fine	82	45.6
Not good	60	33.3
I do not know	4	2.2
Total	180	100.00

Source: Field Survey Data

Here disclose aspect of respondents are tested in spite of doing it very good a mere 18.9% go in for saying what they actually did, others want to take a safer stand by saying it was just fine (around 46%) and around 35% do not want to reveal the cat out of the bag. This shows the disclosure ability as well as the confidence of investors, generally they would not want to disclose their position or stands simply because they are not sure until the results are disclosed. As disclosing may lead to embracement in case the result doesn't go their way or events may not turn in their favor hence majority of respondents choose to take a safe stand.

References:

- Barber B M and Odien Terrance (2000), "Trading is Hazardous to Your Health", *The Journal of Finance*, Vol. LV, No. 2 pp. 773-806
- Barber B M and Odien Terrance (2001), "Boys will be Boys: Gender, Overconfidence, and Common Stock Investment", *Quarterly Journal of Economics*, Vol.116, No. 1, pp. 261-292
- Bhandari G and Richard Deaves (2006), "The Demographics of Overconfidence", *The Journal of Behavioural Finance*, Vol.7, No. 1, pp. 5-11.
- Goetzmann W and Zhu N (2005), "Rain and Shine: Where is the Weather Effect?" *European Financial Management*, Vol. 11, No. 5, pp. 559-78
- Hirshleifer D and Shumway, T (2003), "Good Day Sunshine: Stock Returns and the Weather", *Journal of Finance*, Vol.58, No.3, pp. 1009-32
- Kahneman, Daniel and Tversky, Amos, (1979), *Prospect Theory: AN Analysis of Decision Under Risk*, *Econometrica*, Vol. 47, No. 2, pp 263-291
- Kahneman, Daniel and Tversky, Amos, and Slovic, Paul, (1990), *The Causes of Preference Reversal*, *American Economic Review*, No. 80, pp. 204-217.
- March, James, and Sharpira, Zur, (1987), *Managerial Perspective on Risk Taking*, *Management Science*, No. 33, pp. 1404-17.
- Olsen Robert (1998), "Behavioural Finance and its Implications for Stock Price Volatility, Association for Investment Management and Research", *Financial Analysts Journal*, Vol. 54, No. 2, pp. 10-18
- O'Toole Brian and Steiny Richard (1995), "Behavioural Finance101", *Financial Planning*, May 2005, pp. 91-92
- Ritter J R (2005), "Behavioural Finance", *Pacific Basin Finance Journal*, Vol.11, No. 4, pp. 429-437.
- Sameulson, P. A., (1963), *Risk and uncertainty: A fallacy of large numbers*, *Scientia*, Vol. 98, No. 4-5, pp. 108-113.
- Saunders E M J (1993), "Stock Prices and Wall Street Weather", *American Economic Review*, Vol. 83, No.5, pp.1337-45
- Shefrin and Statman, Meir, (1994), "Behavioural Capital Asset Pricing", *Journal of Financial and Quantitative Analysis*, Vol. 29, No. 3, pp. 323-349
- Shefrin H (2000), *Beyond Greed and Fear*, Harvard University Press, Boston.
- Shiller, Robert and Pound John, (1986), *Speculative Behaviour of Institutional Investors*, National Bureau of Economic Research, Working Paper No. 1964.
- Shiller, Robert, (1990), *Market Volatility and Investor Behaviour*, *American Economic Review*, Vol. 80, No. 2, pp.58-62.
- Shiller, Robert, (1998), *Human Behaviour and the Efficiency of the Financial System*, National Bureau of Economic Research Working Paper No. W6375.
- Thaler, Richard and Tversky, Amos and Kahneman, Daniel, and Schwartz, Alan, (1997), *The Effect of Myopia and Loss Aversion on Risk Taking: An Experimental Test*, *Quarterly Journal of Economics*, Vol. 112, No. 2, pp.647-661.
- Thompson, Suzanne C., (1981), *Will it hurt if I can Control it? A complex answer to a simple question*, *Psychological Bulletin*, No. 90, pp. 89-101.