

An Empirical Investigation of Investors Perspective toward Shocks

Nitin Huria,

Research Scholar,
MDU-CPAS, Gurugram,
Maharshi Dayanand University, Rohtak, India.

Dr. Pooja Yadav,

Assistant Professor,
MDU-CPAS, Gurugram,
Maharshi Dayanand University, Rohtak, India.

ABSTRACT

India being the most competitive country in the 21st century is exposed to several challenges in terms of transition stance on the global outlook. However, the recognition of its inherited distinctiveness and demographic profile is crafting its future progression and inculcating positivity in the financial markets and the overall economy. But despite this, in the swift transformation no wonder at times certain macroeconomic news instill shocks in the stock market send thousands of investors in the murky of investment collapse. Hence, on this focal point this paper aims to study the investors' perspective towards selected shocks and the impact of these shocks on their investment decisions. The empirical findings of the paper shows that though stock markets are prone to various shocks but shocks in the stock markets are not all the time harmful for market instead they are part of it. The majority of investors were of the view that a number of macroeconomic news can bring positive and negative shifts in the market as well as in their investment decisions. The results of ANOVA exhibit that there exists no significant difference between the mean scores of responses of investor groups among and within age, qualification and occupation categories.

Keywords: Exposed, Stance, Inherited, Distinctiveness, Inculcating.

INTRODUCTION:

The behaviour of most of the financial markets around the globe has been erratic since the last two to three decades as perceptible stability of the markets is often devastated by some slender turbulences of the environment in which a specific stock market operates. Such turbulences, which trigger a multiplicative adjustment in the market index, distort the flow of funds to the commercial sector on one part and on the other hand send thousands of investors in the murky of investment collapse. The rationale and response to such changes should provoke transformed curiosity in the price movement of security markets in the transition countries. According to the efficient market hypothesis (Fama, 1965), "the stock prices at any time fully reflect all available information" meaning that stock prices are impulsive and that only rational asset pricing models can determine the expected stock returns. But the facts on the stock market and empirical studies demonstrated that the stock prices are not capricious and do not always reflect all available information. An underneath view to this stock market philosophy (Keynes, 1936) represented that the investors are not rational and is guided by short-run speculative motives. Investors are more interested in the speculative trading and short-run movements than in assessing the present value of future dividends and holding an investment for a significant period thus, have very short-term planning horizons (Crotty, 1990). But as per the efficient market hypothesis investors have a long-term perspective and they make rational calculation of the return on investment based on changes in the long-run income flows.

Over the years several such inconsistencies with these popular asset pricing models have emerged which grounds some of the market anomalies. But in the market fluctuations the events themselves are not so important, as much as the human reactions to those events (Lee et al., 2002). As the financial markets under

react to information in some cases or market price does not move upward far enough in reaction to good news, or does not move downward far enough in reaction to bad news, while they may overreact in other situations (Bloomfield et al., 1991). In order to understand these inherent dynamics of financial markets (Malliaris and Stein, 1999) investigated that “If price changes are induced by changes in information, can information concerning the shocks in fundamental factors explain the magnitude of the observed price volatility?” Or there are other factors that can explain the variance of price changes. Moreover, (Cutler et al., 1989) also emphasized that if the information is the cause of market anomalies, then how is possible to reach excess returns with little or no news.

Therefore, in the current environment the stock market is steered by the discounted information conceded from dealers to the investors. In the face of vagueness ultimately the nastiest hit is the individual secondary market investors. In this radiance, this research paper tries to analyze the behaviour of individual investors in terms of awareness and attitude towards good and bad news and their effect on the stock market.

LITERATURE REVIEW:

A brief review of the studies conducted in the past on the theme of investors' perspective is as follow-

A. Dutta (2001) examined the behaviour of Indian individual investors to good and bad news and their effect on the stock market. For this purpose the author collected sample from 600 investors. The study found that the individual investors have high confidence in themselves and are not steered by the market discounted asymmetric information. Further, it was also highlighted that if the policy makers take these issues seriously the catastrophic fall in market indices could be stopped by changing the asymmetric information in favor of individual investors.

A. Bandopadhyaya and A. L. Jones (2005) studied the market's enthusiasm to admit the risks inherent in an equity market at a given point in time through a newly constructed model and tried to capture directly the market pricing risk return tradeoffs. The results of the study indicated that the EMSI constructed model explain short run changes much better than the market index itself and the daily price changes are significantly related with the investor sentiment.

R.B Sharma and S. L. Pandey (2010) investigated the investors' psychology towards financial markets during the 2009 crisis. The authors found high volatility of SENSEX, fluctuating interest rate, issues of corporate governance like factors influence the investors' psychology negatively which shifted their investments to government securities and banks in view of safest avenues and made them more conservative.

R. Boussaidi (2012) studied the overreaction/overconfidence of investors causing expansion of return volatility and price divergence from the rational track due to excessive trade by testing causality between return volatility and trading volume without including public information. But the presence of overconfidence was confirmed only by one third of the sample included in the study.

Savor (2012) studied what factors other than new public information may be a cause of large stock price movements and compares the investors in terms of how they respond to information and no information based price changes. The study found results consistent with the hypothesis that investors under react to new information about the firm and overreact to price movements caused by other factors, such as shifts in investor sentiment or liquidity shocks. These recommendations are important to investors and it has been proven in a large body of literature. The studies show that recommendations result in significant contemporaneous stock price reactions, and that investors can profit by trading on recommendations even after they are released (Altinkilic and Hansen, 2009; Asquith et al. 2005; Loh and Stulz, 2011).

A. Hoffman and T. Post (2013) examined the two important determinants (optimism and fear) in the decision making behaviour of the investors in response to the individual return and risk experiences. The empirical findings of the study indicated that past returns positively impact the optimism and negatively impact the risk perceptions whereas, the realized risks does not impact optimism and fear.

M. H. Kuo, P. K. Huang, and W. J. Jane (2013) investigated the changed behaviour of investors after the recent crisis towards risk and investment in Taiwan. Their findings displayed the greatly disturbed financial position of the investors after the financial crisis in the sense that more than 50% of the investors covered in the study claimed that their financial position has harshly aggravated. Moreover, the investors went through the crisis period became more risk averse; they are trading in less amount and prejudice towards recovering their losses.

C. Cella, A. Ellul, and G. Mariassunta (2013) studied the role of short horizon investors in the amplification of the market wide shocks on stock assets in the light that short term returns are important for investors with short horizon. The results suggested that during the periods of shocks short term investors sell their stock heavily asking for liquidity than the long term investors which consequently create pressure on the market which result

in large price drops and amplify the market wide negative episodes.

M. Jlassi, K. Naoui, and W. Mansour (2014) examined the financial crisis of 2007-09 and market volatility with overconfidence behaviour of the investors in global financial markets. Their research spanned over 27 countries and found overconfidence enticement factor for triggering and prolonging the financial crisis in US and other continents. Further, overconfidence is more articulated for developed markets than the developing ones.

M. A. Zouch, M. B. Abbas, and Y. Boujelbene (2015) tested the role of American investors in the amplification of financial depression by capturing the volatility spill over between the S&P 500 index and investor sentiment measures. Their results explored significant effect of investor attitude on return and volatilities and vice versa during the crisis. Likewise it has been suggested that investor sentiments can be used as predictor of returns-volatility by other investors.

J. Angelovska (2016) tested the rationale behind the firm-level one-day share price shocks and post -shock reactions. The author found no information that accompanied one-day share price shocks rather the irrational behaviour of the uninformed investors drives the stock market returns. Hence the results were supportive of short-term price reversal hypothesis in the case of price declines.

OBJECTIVES OF THE STUDY:

- ❖ To study the investors’ perspective towards selected shock impacts on Indian stock market.
- ❖ To study the investors’ responses towards the selected macroeconomic shocks on their investing decisions.
- ❖ To identify the significant differences among the responses of investors based on age, qualification and occupation.

HYPOTHESIS:

H₀: No Significant difference exists among the responses of investor groups of age, qualification and occupation.

RESEARCH METHODOLOGY:

Sources of Data:

As stated prior the focus of this study is to explore investors’ perspective towards shocks on national stock exchange of India and how these shocks impact their investment decisions and risk profile. For this purpose, primary data has been used which is collected with the help of self established closed ended questionnaire. The questionnaire items were worded to capture investors’ attitude perception and actual behaviour, and were measured using Likert Scale. A total of 122 investors mainly investing in equities participated in the study and responded to questionnaires in the district: Rohtak and Gurugram of Haryana state in India.

Period of Study:

The present study engages a horizon from 01/10/2018 until 03/31/2018 for the testing rationale.

Tools Applied:

For the purpose of estimation and obtaining meaningful outcomes from the filled data, descriptive statistics (Percentage) and one way ANOVA techniques has been applied using SPSS 20.0 version.

Questionnaire Reliability analysis:

At the outset of the analysis, test for the reliability of the questionnaire was applied. Table 1.1 and 1.2 reports the results of reliability analysis. The tables show the valid, and total number of respondents, the number of items included in the questionnaire and the value of the Cronbach's Alpha statistic. The value of the Cronbach's Alpha is found to be .703 which is equivalent to the accepted level of 0.70 indicating the reliability of the document and approval for further analysis.

Table 1.1: Case Processing Summary

Cases	N	%
Valid	122	100.0
Total	122	100.0

Table 1.2: Reliability Statistics

Cronbach's Alpha	N of Items
.703	15

EMPIRICAL FINDINGS AND DISCUSSION:

Following are the results obtained from the analysis:

DESCRIPTIVE STATISTICS:

Demographic Profile of Respondents:

Table 1.3 and 1.4 display the demographic profile of the respondents included in the study. Among the total sample, in case of age 32% (39) respondents were in the age group of 20-30, 34.4% (42) in the age group of 31-40, 20.5% (25) in the age of 41-50, 9.8% (12) between the age of 51-60 and 3.3% (4) above the age of 60 were found. The qualification column of the respondents shows that most of the respondents 64.5% (79) reside in the category of graduate followed by 30.3% (37) in the category of post graduation. 3.3% (4) respondents were of doctorate level and 1.6% (2) respondents were found in the category of higher secondary. The occupation profile of the respondents reveals that more than half of the total sample, 52.5% (64) respondents was private employees followed by 34.4% (42) respondents having their own business or self employed, 8-8 respondents (6.6%) were in the categories of government service and on contract basis respectively. Further, the table 1.4 exhibits the most preferred option of investment of the respondents which disclose that 60.7% (74) respondents invest in stocks whereas, 24 and 24 respondents (19.7%) respectively chosen FDs & debentures and mutual funds as their preferred mode of investment.

Table 1.3: Demographic Profiles of Respondents

Age	Frequency	Percent	Qualification	Frequency	Percent	Occupation	Frequency	Percent
20-30	39	32.0	Higher Secondary	2	1.6	Self Employed (Business)	42	34.4
31-40	42	34.4	Graduate	79	64.8	Government Service	8	6.6
41-50	25	20.5	Post Graduation	37	30.3	Private Employee	64	52.5
51-60	12	9.8	Doctorate	4	3.3	On Contract Basis	8	6.6
Above 60	4	3.3	Total	122	100.0	Total	122	100.0
Total	122	100.0						

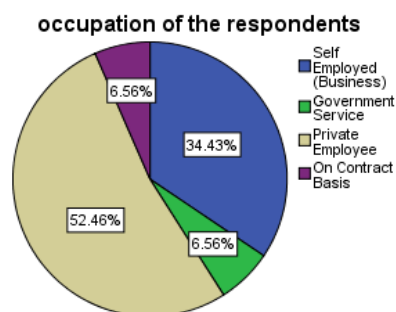
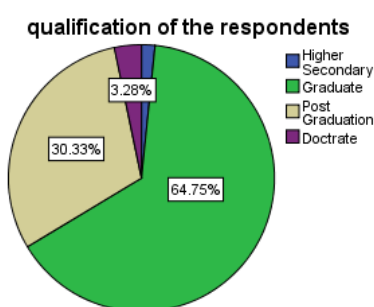
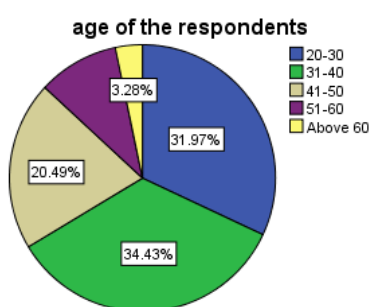
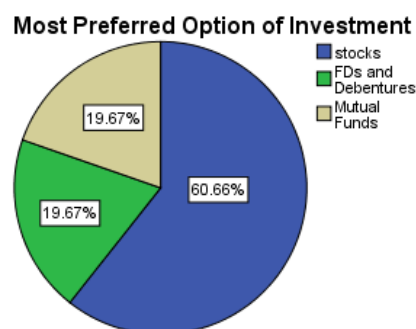


Table 1.4

Preferred option of Investment	Frequency	Percent
Stocks	74	60.7
FDs and Debentures	24	19.7
Mutual Funds	24	19.7
Total	122	100.0



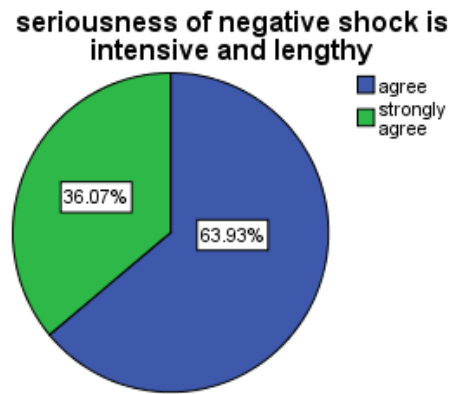
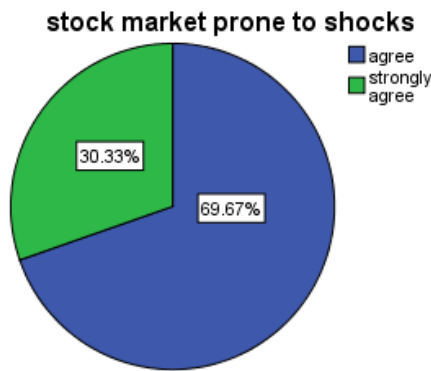
Response towards Shocks:

The following tables display the response of respondents in terms of shocks in the stock market. As the table 1.5 and 1.6 shows that 69.7% (85) respondents agree with the statement that stock markets are prone to various shocks while 30.3% (37) respondents were of the view of strongly agree with the same statement. Likewise, in response to the statement Seriousness of negative shock is intensive and lengthy 63.9% (78) respondents were agree with this whilst 36.1% (44) respondents responded strongly agree in this support.

Table 1.5 and 1.6: Stock markets are prone to various shocks and Seriousness of negative shock is intensive and lengthy

Response	Frequency	Percent
strongly agree	37	30.3
Agree	85	69.7
Total	122	100.0

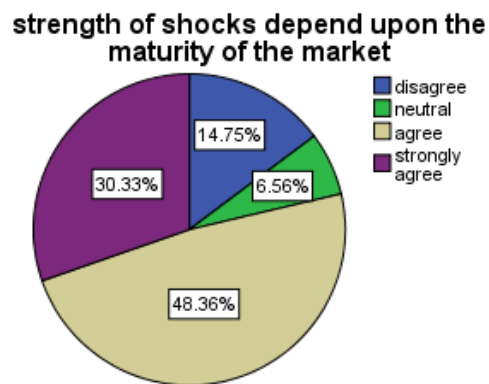
Response	Frequency	Percent
strongly agree	44	36.1
agree	78	63.9
Total	122	100.0



Further, the responses in the table 1.7 of the statement that strength of shocks depends upon the maturity of the market 48.4% (59) respondents reported agree with the statement followed by 30.3% (37) strongly agree, 14.8% (18) respondents disagree and 6.6% (8) respondents were being neutral in this respect.

Table 1.7: Strength of shocks depend upon the maturity of the market

Response	Frequency	Percent
strongly agree	37	30.3
Agree	59	48.4
Neutral	8	6.6
Disagree	18	14.8
Total	122	100.0



The responses in terms of the statement gaining of stock market is very less on account of positive shocks disclose that 45.1% (55) respondents disagree with this statement whereas, 36.1% (44) respondents replied strongly agree and 12.3% (15) respondents were being neutral in this regard. Hence, this means that in case of positive shocks stock market does not gain very less and conversely appropriate opportunities are available. Similarly, in case of the statement during the high volatile periods of shocks in the market the spreading of information creates confusion and misleads investors the table 1.9 reveals that, 37.7% (46) investors are neutral in this respect, 27% (33) being strongly agree and 23% (28) respondents are in support of this.

Table 1.8: Gaining of stock market on account of positive shocks

Response	Frequency	Percent
strongly agree	44	36.1
Agree	8	6.6
Neutral	15	12.3
Disagree	55	45.1
Total	122	100.0

gaining of stock market on account of positive shocks

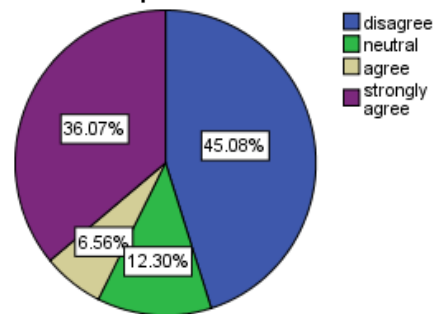
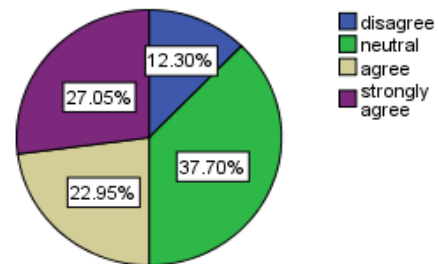


Table 1.9: during high volatile periods of shock in the market the spreading of information creates confusion and misleads investors.

Response	Frequency	Percent
strongly agree	33	27.0
Agree	28	23.0
Neutral	46	37.7
Disagree	15	12.3
Total	122	100.0

high volatile period of shocks in the market spreading of information creates confusion and misleads investors.



The table 1.10 further demonstrates the statement shocks in the stock markets are not harmful for market and economy the majority of investors 36.9% and 36.1% (45, 44) replied agree and neutral respectively in this context meaning that up to some extent shocks are necessary part of stock markets.

Likewise, in response to the statement emerging countries like India are prone to more shocks rather than the developed countries 55.7% (68) investors responded agree to this but conversely 44.3% (54) respondents were of the view disagree in this regard.

Table 1.10: Shocks in the stock markets are not harmful for market and economy

Response	Frequency	Percent
Agree	45	36.9
Neutral	44	36.1
Disagree	18	14.8
strongly disagree	15	12.3
Total	122	100.0

Shocks in the stock markets are not harmful for market and economy

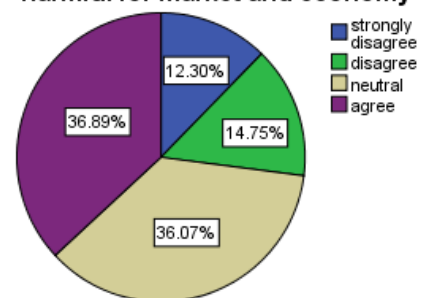
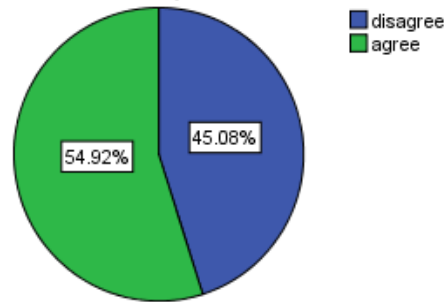


Table 1.11: Emerging countries like India are prone to more shocks rather than developed countries

Response	Frequency	Percent
Agree	68	55.7
Disagree	54	44.3
Total	122	100.0

emerging countries like India are prone to more shocks rather than developed countries

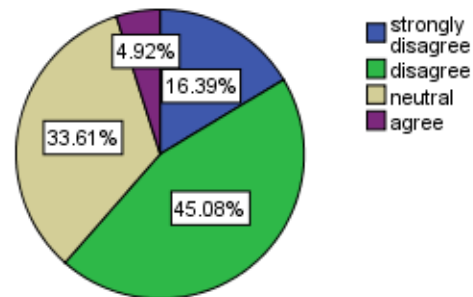


While asked about the statement does the intensity or degree of shock dependence on the regulatory environment of the stock market the majority of investors as represented in table 1.12 and 1.14 answered that regulatory environment of stock market plays important role in controlling the shocks in the market as 45.1% (55) investors were found disagree and 16.4% (20) as strongly agree for the former case and 68.9% (84) respondents as being agree in the later statement.

Table 1.12: Intensity or degrees of shocks in a stock market does not depend upon the regulatory environment of the stock market

Response	Frequency	Percent
agree	6	4.9
neutral	41	33.6
disagree	55	45.1
strongly disagree	20	16.4
Total	122	100.0

intensity or degrees of shocks in a stock market does not depend upon the regulatory environment of the stock market.



The responses of investors in terms of the statements in table 1.13 – 1.16 further elaborate that reporting of actual positive high GDP growth rate and corporate financial statement news release infuses positive shock in the stock market as 57.4% (70), 36.1% (44) & 52.5% (64) respondents answered agree, strongly agree and agree respectively in this respect.

Table 1.13: Reporting of actual positive high GDP growth rate create positive shock in stock market

Response	Frequency	Percent
strongly agree	44	36.1
Agree	70	57.4
Neutral	8	6.6
Total	122	100.0

Reporting of actual positive high GDP growth rate create positive shock in stock market.

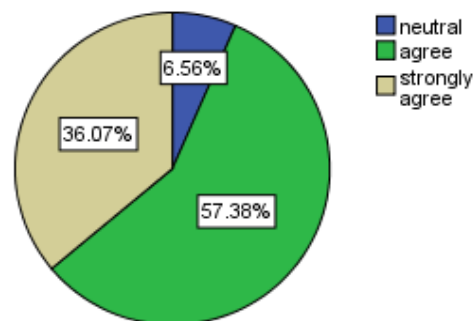


Table 1.14: proper regulations of stock market can control the degree of shocks in the market

Response	Frequency	Percent
strongly agree	16	13.1
Agree	84	68.9
Neutral	19	15.6
Disagree	3	2.5
Total	122	100.0

proper regulations of stock market can control the degree of shocks in the market

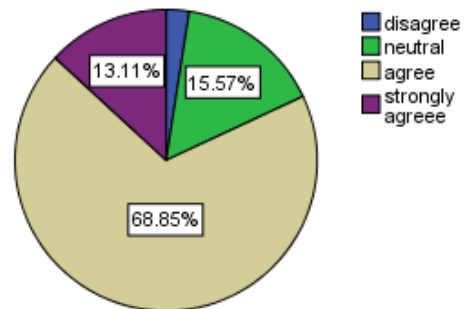
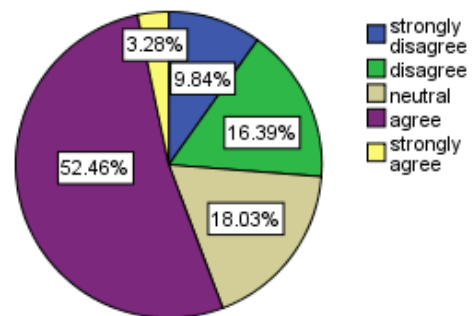


Table 1.15: Corporate financial statement news release gives high positive shocks to stock market

Response	Frequency	Percent
strongly agree	4	3.3
Agree	64	52.5
Neutral	22	18.0
Disagree	20	16.4
strongly disagree	12	9.8
Total	122	100.0

Corporate financial statement news release gives high positive shocks to stock market

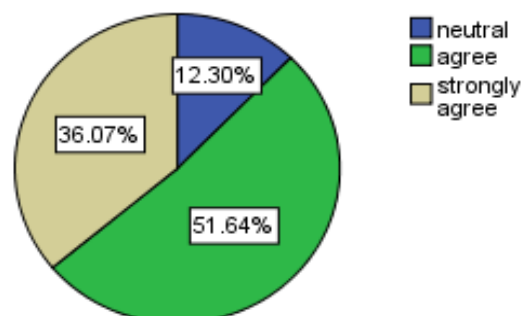


Furthermore, in case of the statement information pertaining to positive industrial growth rate (industrial production index) creates positive shock in stock market, the majority 51.6% (63) of investors were found agree and 36.1% (44) strongly agree respectively that the macroeconomic activity such as information pertaining to positive industrial growth rate (industrial production index) can bring positive shock in stock market.

Table 1.16: Information pertaining to positive industrial growth rate (industrial production index) creates positive shock in stock market

Response	Frequency	Percent
strongly agree	44	36.1
agree	63	51.6
neutral	15	12.3
Total	122	100.0

Information pertaining to positive industrial growth rate (industrial production index) create positive shock in stock market.



While asked about the statements related to the impact of shocks on their investment decision and risk profile the responses from table 1.17 – 1.20 exhibits that positive increase in GDP growth rate motivates investors to

invest more in stock market as 57.4% (70) investors agree with the statement. The majority of the investors also constantly review exchange rates because appreciation or depreciation of rupee against US\$ impacts the stock market (see table 1.18),

Table 1.17: Positive increases in GDP growth rate motivates me to invest more in stock market

Response	Frequency	Percent
agree	70	57.4
neutral	37	30.3
disagree	15	12.3
Total	122	100.0

Positive increase in GDP growth rate motivates me to invest more in stock market.

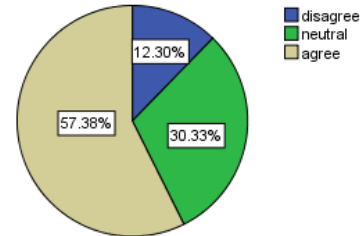
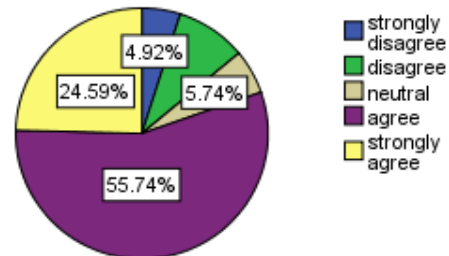


Table 1.18: I constantly review exchange rates because appreciation or depreciation of rupee against US\$ impacts the stock market in same direction

Response	Frequency	Percent
strongly agree	30	24.6
Agree	68	55.7
Neutral	7	5.7
Disagree	11	9.0
strongly disagree	6	4.9
Total	122	100.0

I constantly review exchange rates because appreciation or depreciation of rupee against US\$ impacts the stock market in same direction.



When answering the question in association to their investments with essence to shocks the bulk of investors 63.9% (78) were agree to the fact that the industrial production growth information is very important to me and has a great impact on my investment decision, although 36.1% (44) investors were found of the view disagree with the same (see table 1.19).

Further, in response to the statement (in table 1.20) the announcements under the budget have nothing for investors so it negatively impacts my investments in stock market, 41.8% (51) respondents replied disagree in this regard whereas, 29.5 (36) respondents felt neutral in terms of this.

Table 1.19: The industrial production growth information is very important to me and has a great impact on my investment decision

Response	Frequency	Percent
agree	78	63.9
disagree	44	36.1
Total	122	100.0

The industrial production growth information is very important to me and has a great impact on my investment decision.

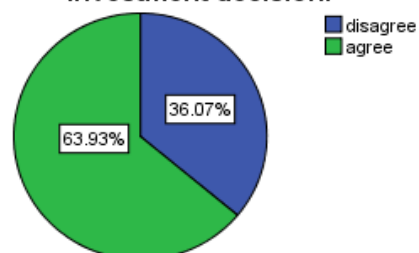
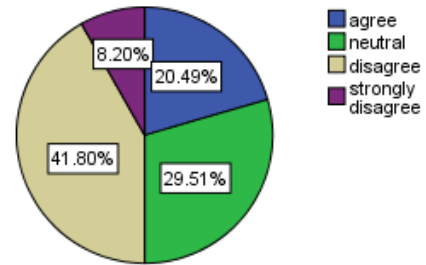


Table 1.20: the announcements under the budget have nothing for investors so it negatively impacts my investments in stock market

Response	Frequency	Percent
Agree	25	20.5
Neutral	36	29.5
Disagree	51	41.8
strongly disagree	10	8.2
Total	122	100.0

The announcements under the budget have nothing for investors so it negatively impacts my investments in stock market.

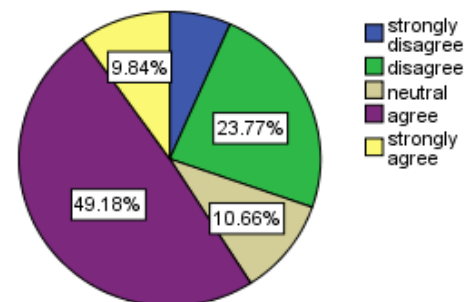


Besides this, in the current scenario the increasing reputation of India is having positive impact on the stock market, as 49.2% (60) & 9.8% (12) respondents agree and strongly agree respectively in view to the statement in table 2.1.

Table 2.1 the current increasing reputation of India has a positive impact on stock market

Response	Frequency	Percent
strongly agree	12	9.8
agree	60	49.2
neutral	13	10.7
disagree	29	23.8
strongly disagree	8	6.6
Total	122	100.0

The current increasing reputation of India has a positive impact on stock market.



In concern to the risk profile of the investors associated with the macroeconomic shocks the following couple of statements in tables 2.1 - 2.2 indicates that investors consider investing in stock market right away after the GDP growth rate news release, balance of trade statistics announcement, industrial production growth rate news to be riskier, as in all such cases majority of investors are found to be agree as well as strongly agree with the respective statements.

Table 2.1 Investing in stock market right away after the GDP growth rate news release is riskier for me

Response	Frequency	Percent
agree	58	47.5
neutral	43	35.2
disagree	21	17.2
Total	122	100.0

Investing in stock market right away after the GDP growth rate news release is riskier for me

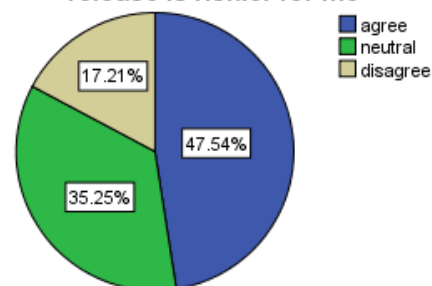


Table 2.2 Investing in stock market right away after the budget announcement is riskier for me.

Response	Frequency	Percent
strongly agree	4	3.3
agree	62	50.8
neutral	13	10.7
disagree	43	35.2
Total	122	100.0

Investing in stock market right away after the budget announcement is riskier for me.

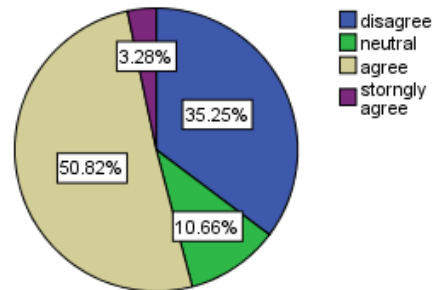


Table 2.3 Results of ANOVA

The table 2.18 presents the results of one way ANOVA test based on age, qualification and occupation categories. Each category corresponds to the estimated values of sum of square, mean square, F statistic and significance (p) value against the statements in the three factors viz. impacts of shocks on stock market, impact of shocks on investment decisions and risk profile. The table shows the values for comparison between the groups and within the groups. Based on the significance values of between and among the groups we cannot reject the null hypothesis of no significant difference exists among the responses of investor groups of age, qualification and occupation categories at 5% level of significance except the two statements in the occupation category that stock market are prone to various shocks and the current increasing reputation of India has a positive impact on the stock market for which the p values stands at .024 and .022 respectively implying that for these two statements significant difference exists among the responses of investors based on occupation groups.

CONCLUSION:

On the central theme of highlighting the investors’ perspective towards selected shocks as well as the impact of these shocks on their investment decisions and risk profile, the key points of the analysis of investors’ responses in this paper holds that though stock markets are prone to various shocks but Shocks in the stock markets are not harmful for market and economy. The Seriousness of negative shock is intensive and lengthy. The majority of investors in the current scenario are now better informed about some shocks in the market.

However, this is also a fact that the strength of shocks depends upon the maturity of the market. During the high volatile periods of shocks in the market the spreading of information creates confusion and misleads investors. Emerging countries like India are prone to more shocks. The regulatory environment of stock market plays an important role in controlling the shocks in the market. The macroeconomic activities such as information pertaining to positive industrial growth rate (industrial production index) and GDP can bring positive shock in the stock market. The positive increase in GDP growth rate motivates investors to invest more in stock market and the majority of the investors constantly review exchange rates because appreciation or depreciation of rupee against US\$ impacts the stock market. The impact of industrial production growth information, money supply and financial budget by the government on investor’s investment decision reveals that investors consider all these factors significantly impacting their investment decision. Investors consider investing in stock market right away after the GDP growth rate news release, balance of trade statistics announcement, industrial production growth rate news to be riskier.

Further, the results of the ANOVA test reveals that no significant difference exists among the responses of investor groups of age, qualification and occupation categories.

REFERENCES:

Asquith, P., Mikhail, M. B., Au, A. S., (2005). Information content of equity analyst reports. *Journal of Financial Economics*, 75, 245-282

Altinkiliç O, Hansen R (2009). on the information role of stock recommendation revisions. *J Account Econ* 48:17–36.

Angelovska, J. (2016). Large Share Price Movements, Reasons and Market Reaction. *Management*, 21, 1-17.

Bloomfield, R., Libby, R., Nelson, M. W. (1991). Under reactions, overreactions and moderated confidence, *Journal of Financial Markets*, 3, 113-137.

Bandopadhyaya, A., & Jones, A.L. (2006). Measuring Investor Sentiment in Equity Markets. *Journal of Asset Management*, Vol. 7, No. 3/4, 208-215.

Cutler, D. M., Poterba, J. M., Summers L. H. (1989). What Moves Stock Prices? *Journal of Portfolio Management* 15, 4-12.

Crotty, J. R. (1990). Owner-manager conflict and financial theories of investment instability: A critical assessment of Keynes, Tobin, and Minsky, *Journal of Post-Keynesian Economics*, 12, 519-542.

Cella, C. et. al.(2013). Investors’ Horizons and the Amplification of Market Shocks. *Financial Market Group Discussion Paper 717 (LSE)*, 1-64.

Dutta, A. (2001). Investors' reaction to good and bad news in secondary market: A study relating to investors' behaviour. *Finance India*, XV (2), 567-576.

Fama, E. (1965). The Behavior of Stock Market Prices, *Journal of Business*, 38, 34-105.

Hoffmann, A. Post, T. (2012). *What Makes Investors Optimistic? What Makes Them Afraid? Working paper*, Maastricht University and Netspar: The Netherlands, 1–40.

Jlassi, M. Naoui, K. Mansour, W. (2014). Overconfidence Behavior and Dynamic Market Volatility: Evidence from International Data. *Procedia Economics and Finance*, 13(2014), 128-142

Keynes, J.M. (1936). *The General Theory of Employment, Interest, and Money*, Cambridge University Press.

Kuo, M. et. al.(2013). The impact of the financial tsunami on stock investment behavior: The case of individual investors in Taiwan. *Investment Management and Financial Innovations*, (1), 207-217.

Lee, W., Jiang, C., Indro, D. (2002). Stock market volatility, excess returns, and the role of investor sentiment, *Journal of Banking and Finance*, 26, 2277-2299.

Loh, R. K., Stulz, R. M., (2011). When are analyst recommendation changes influential? *Review of Financial Studies* 24, 593627

Malliari, A. G. and Stein, J. L. (1999). Methodological issues in asset pricing: random walk or chaotic dynamics, *Journal of Banking & Finance*, 23, 1605-1635

Sharma, B. R, & Pandey, L. S (2010). Impact of Global Financial Crisis on Investors’ Psychology: An Analysis. *Management Insight*, 6(1), 14-24.

Savor, P. (2012). Stock Returns after Major Price Shocks: The Impact of Information. *Journal of Financial Economics*, 106(3), 635-659.

Zouch, M., Abbes, M. B., & Boujelbène, Y.(2015). Volatility spillover and investor sentiment: Subprime crisis. *Asian Academy of Management Journal of Accounting and Finance*, 11(2), 83–101.

APPENDIX:

Table 2.3 One Way ANOVA Test Results (Based on Age, Qualification, and Occupation)

STATEMENTS		AGE				QUALIFICATION				OCCUPATION			
		Sum of Squares	Mean Square	F Stat.	Sig.	Sum of Squares	Mean Square	F Stat.	Sig.	Sum of Squares	Mean Square	F Stat	Sig.
stock market prone to shocks	Between Groups	1.000	.250	1.180	.323	1.009	.336	1.602	.193	1.973	.658	3.260	.024
	Within Groups	24.779	.212			24.770	.210			23.806	.202		
	Total	25.779				25.779				25.779			
seriousness of negative shock is intensive and lengthy	Between Groups	1.580	.395	1.740	.146	.386	.129	.548	.651	.637	.212	.911	.438
	Within Groups	26.551	.227			27.745	.235			27.494	.233		
	Total	28.131				28.131				28.131			

STATEMENTS		AGE				QUALIFICATION				OCCUPATION			
		Sum of Squares	Mean Square	F Stat.	Sig.	Sum of Squares	Mean Square	F Stat.	Sig.	Sum of Squares	Mean Square	F Stat	Sig.
understanding of prevailing shock in the market	Between Groups	2.563	.641	1.229	.302	1.139	.380	.718	.543	3.095	1.032	2.014	.116
	Within Groups	60.978	.521			62.402	.529			60.446	.512		
	Total	63.541				63.541				63.541			
strength of shocks depend upon the maturity of the market	Between Groups	2.585	.646	.663	.619	3.435	1.145	1.194	.315	5.729	1.910	2.033	.113
	Within Groups	114.014	.974			113.163	.959			110.869	.940		
	Total	116.598				116.598				116.598			
gaining of stock market on account of positive shocks	Between Groups	9.176	2.294	1.242	.297	5.785	1.928	1.037	.379	6.971	2.324	1.256	.293
	Within Groups	216.046	1.847			219.436	1.860			218.250	1.850		
	Total	225.221				225.221				225.221			
high volatile period of shocks in the market spreading of information creates confusion and misleads investors.	Between Groups	1.098	.274	.173	.952	7.380	2.460	1.621	.188	8.905	2.968	1.973	.122
	Within Groups	185.328	1.584			179.046	1.517			177.521	1.504		
	Total	186.426				186.426				186.426			
Shocks in the stock markets are not harmful for market and economy	Between Groups	3.126	.781	.763	.551	2.487	.829	.812	.490	6.953	2.318	2.358	.075
	Within Groups	119.801	1.024			120.439	1.021			115.973	.983		
	Total	122.926				122.926				122.926			
emerging countries like India are prone to more shocks rather than developed countries	Between Groups	3.181	.795	.794	.531	4.249	1.416	1.439	.235	4.667	1.556	1.586	.196
	Within Groups	117.212	1.002			116.144	.984			115.726	.981		
	Total	120.393				120.393				120.393			
intensity or degrees of shocks in a stock market does not depend upon the regulatory environment of the stock market.	Between Groups	.586	.146	.227	.923	.209	.070	.108	.955	1.256	.419	.660	.578
	Within Groups	75.488	.645			75.865	.643			74.818	.634		
	Total	76.074				76.074				76.074			
proper regulations of stock market can control the degree of shocks in the market	Between Groups	.342	.085	.217	.928	.700	.233	.603	.614	.610	.203	.525	.666
	Within Groups	45.995	.393			45.637	.387			45.726	.388		
	Total	46.336				46.336				46.336			
Reporting of actual positive high GDP growth rate create positive shock in stock market.	Between Groups	1.965	.491	1.459	.219	.215	.072	.206	.892	.791	.264	.767	.515
	Within Groups	39.412	.337			41.162	.349			40.586	.344		
	Total	41.377				41.377				41.377			
Corporate financial statement news release gives high positive shocks to stock market	Between Groups	9.854	2.464	2.188	.075	2.180	.727	.615	.607	3.205	1.068	.911	.438
	Within Groups	131.719	1.126			139.394	1.181			138.369	1.173		
	Total	141.574				141.574				141.574			
Information pertaining to positive industrial growth rate (industrial production index) create positive shock in stock	Between Groups	3.618	.905	2.183	.075	.772	.257	.592	.622	.961	.320	.739	.531
	Within Groups	48.488	.414			51.334	.435			51.146	.433		

STATEMENTS		AGE				QUALIFICATION				OCCUPATION			
		Sum of Squares	Mean Square	F Stat.	Sig.	Sum of Squares	Mean Square	F Stat.	Sig.	Sum of Squares	Mean Square	F Stat	Sig.
market.	Total	52.107				52.107				52.107			
I constantly review exchange rates because appreciation or depreciation of rupee against US\$ impacts the stock market in same direction.	Between Groups	9.905	2.476	2.361	.057	2.147	.716	.647	.586	2.030	.677	.611	.609
	Within Groups	122.726	1.049			130.484	1.106			130.601	1.107		
	Total	132.631				132.631				132.631			
Positive increase in GDP growth rate motivates me to invest more in stock market.	Between Groups	3.342	.835	1.719	.150	.218	.073	.143	.934	2.453	.818	1.670	.177
	Within Groups	56.863	.486			59.987	.508			57.752	.489		
	Total	60.205				60.205				60.205			
The industrial production growth information is very important to me and has a great impact on my investment decision.	Between Groups	7.335	1.834	2.019	.096	3.865	1.288	1.385	.251	3.550	1.183	1.269	.288
	Within Groups	106.271	.908			109.742	.930			110.057	.933		
	Total	113.607				113.607				113.607			
The announcements under the budget have nothing for investors so it negatively impacts my investments in stock market.	Between Groups	4.475	1.119	1.390	.242	3.194	1.065	1.316	.272	.767	.256	.308	.820
	Within Groups	94.181	.805			95.461	.809			97.889	.830		
	Total	98.656				98.656				98.656			
The current increasing reputation of India has a positive impact on stock market.	Between Groups	5.828	1.457	1.131	.345	.881	.294	.223	.881	12.158	4.053	3.312	.022
	Within Groups	150.705	1.288			155.652	1.319			144.375	1.224		
	Total	156.533				156.533				156.533			
Investing in stock market right away after the budget announcement is riskier for me.	Between Groups	3.902	.975	1.062	.379	1.262	.421	.451	.717	2.463	.821	.890	.449
	Within Groups	107.475	.919			110.115	.933			108.914	.923		
	Total	111.377				111.377				111.377			
Investing in stock market right away after the GDP growth rate news release is riskier for me	Between Groups	.924	.231	.439	.780	1.447	.482	.934	.427	.816	.272	.521	.669
	Within Groups	61.478	.525			60.955	.517			61.586	.522		
	Total	62.402				62.402				62.402			
