# FACTOR INFLUENCES AND NON-INSTITUTIONAL INVESTORS BEHAVIOUR: THE STUDY OF INDIAN STOCK MARKET

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**ABSTRACT**

*This study undertakes an empirical survey of the factors, which mostly influence non-institutional investor behavior in the Indian stock market. The results revealed by our sample of 200 respondents confirm that there seems to be a certain degree of correlation between the factors that behavioral finance theory and previous empirical evidence identify as the influencing factors for the average equity investor, and the non-institutional behavior of active investors in the Indian Stock Market influenced by the overall trends prevailing at the time of the survey in the BSE.*

**KEYWORDS**

Non-institutional investor, Behavioral Finance, Decision Making, Indian Stock Market.

## INTRODUCTION

Economic theory on investment decisions treats the investment decision of the non-institutional as a macroeconomic aggregate and the microeconomic foundations of it are drawn from inter temporal utility theory. Non-institutional maximize their utility based on classic wealth criteria making a choice between consumption and investment through time.

However, some empirical studies that first appeared in the 1970s focused on the non-institutional rather than aggregate investor profiles. At about the same time, the sub-discipline of behavioral finance evolved investigating investment choices under conditions of uncertainty. Research in Behavioral finance produced six foremost theoretical streams, i.e. Prospect Theory, Regret Aversion, Self Control, Emotions, Social Interaction and Overconfidence. Each of these research streams captured and analyzed behavioral attributes of non-institutional investors. A Wharton appraisal contributed empirical data for the study of these research streams by examining how demographic variables influence the investment selection and portfolio composition process,

## REVIEW OF LITERATURE

Blume and Friend (1978) provided a comprehensive study and overview of the Wharton survey results and its implications for behavioral finance. Furthermore, Cohn et al. (1975) provided tentative evidence that risk aversion decreases as the investor's wealth increases, while Riley and Chow showed that risk aversion decreases not only as wealth increases, but also as age, income and education increase. LeBaron, Farrelly and Gula (1992) added to the debate, by advocating that non-institutional' risk aversion is largely a function of visceral rather than rational considerations. On the other hand, Baker and Haslem (1974) contended that dividends, expected returns and the firm's financial stability are critical investment considerations for non-institutional investors, and Baker, Haargrove and Haslem (1977) went a step further by proposing that investors behave rationally, taking into account the investment's risk/return tradeoff.

According to Kent, et al. (2015), The most common behavior that most investors do when making investment decision are

(1)Investors often do not participate in all asset and security categories,

(2)Non-institutional investors exhibit loss-averse behavior,

(3) Investors use past performance as an indicator of future performance in stock purchase decisions,

(4)Investors trade too aggressively,

(5) Investors behave on status quo,

(6) Investors do not always form efficient portfolios,

(7) Investors behave parallel to each other, and

(8) Investors are influenced by historical high or low trading stocks.

This study examined the factors that appear to exercise the greatest influence on the non-institutional stock investor, and included not only the factors investigated by previous studies and derived from prevailing behavioral finance theories, but also introduced additional factors generated through personal interviews that have been found to influence the stockholders' investment decisions in India. To that effect, this paper will address two questions: First, what relative importance do decision variables and especially economic decision variables have for non-institutional Investors making stock purchase decisions? Secondly, are there homogeneous clusters or groups of variables that form identifiable decision determinants that investors rely upon when making stock investment decisions?

## DATA AND METHODOLOGY

The study mainly deals with the factor influences of non-institutional investors towards Indian stock market. The names and addresses of 200 novice shareholders were identified with the help of two major brokerage houses in India. The views are conducted in the month of January to December 2016. The analysis of the overall status of the investors and their behavior in Indian Stock Market is based on the primary data. Questionnaires were mailed to those non-institutional investors and 200 full responses were received, for a 36.7 percent response rate. Participants were asked to evaluate the importance of 25 variables, identified from the literature and personal interviews as potentially influencing stock investment decisions, by marking only one of three choices for every one of the 25 variables: "*Act On*" for the variables which were important in making their investment decisions, "*Some Influence*" for the variables of secondary importance in their decision making, and "*No Influence*" for the variables that were not at all significant in their investment decision process. The variables were ranked according to how frequently they were placed in each response category and factor analysis was used to examine how they interacted with each other. In particular, factor analysis was used to identify the similarities among the variables and moreover, group them into identifiable categories.

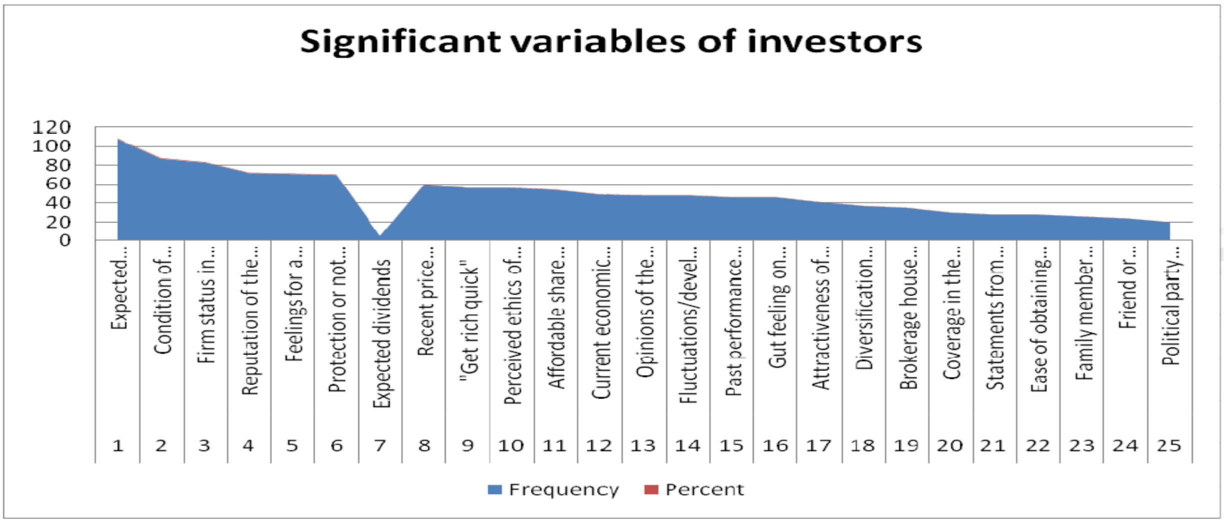
## RESULTS AND DISCUSSION

This study focused exclusively on the variables that were identified by the Indian investors to significantly affect their non-institutional investor behavior, namely the "*Act on*" variables. The results and frequencies of the "*Act on"* variables are presented in Table 1. A more complete picture however, is shown in Table 2, which presents the same data sorted according to those factors that have the least impact and influence on investor behavior ("*no influence*").

**TABLE 1: FREQUENCY DISTRIBUTION OF VARIABLES THAT SIGNIFICANTLY INFLUENCE INVESTOR DECISIONS**

| Rank | Item | Frequency | Percent |
|---|---|---|---|
| i. | Expected corporate earnings | 108 | 72.0% |
| ii. | Condition of financial statements | 87 | 58.0% |
| iii. | Firm status in industry | 83 | 55.3% |
| iv. | Reputation of the firm | 72 | 48.0% |
| v. | Feelings for a firm's products & services | 71 | 47.3% |
| vi. | Protection or not of the investor | 70 | 46.7% |
| vii. | Expected dividends | 5 | 3.3% |
| viii. | Recent price movements in a firm's stock | 60 | 40.0% |
| ix. | "Get rich quick" | 56 | 37.3% |
| x. | Perceived ethics of firm | 56 | 37.3% |
| xi. | Affordable share price | 54 | 36.0% |
| xii. | Current economic indicators | 49 | 32.7% |
| xiii. | Opinions of the firm's majority stockholders | 48 | 32.0% |
| xiv. | Fluctuations/developments in the indices of the major markets | 48 | 32.0% |
| xv. | Past performance of the firm's stock | 46 | 30.7% |
| xvi. | Gut feeling on economy | 46 | 30.7% |
| xvii. | Attractiveness of non-stock investments | 41 | 27.3% |
| xviii. | Diversification needs | 37 | 24.7% |
| xix. | Brokerage house recommendation | 35 | 23.3% |
| xx. | Coverage in the press | 30 | 20.0% |
| xxi. | Statements from politicians & governmental officials | 28 | 18.7% |
| xxii. | Ease of obtaining borrowed funds | 28 | 18.7% |
| xxiii. | Family member opinions | 26 | 17.3% |
| xxiv. | Friend or coworkers recommendations | 24 | 16.0% |
| xxv. | Political party affiliation | 20 | 13.3% |

Sources: Analysis

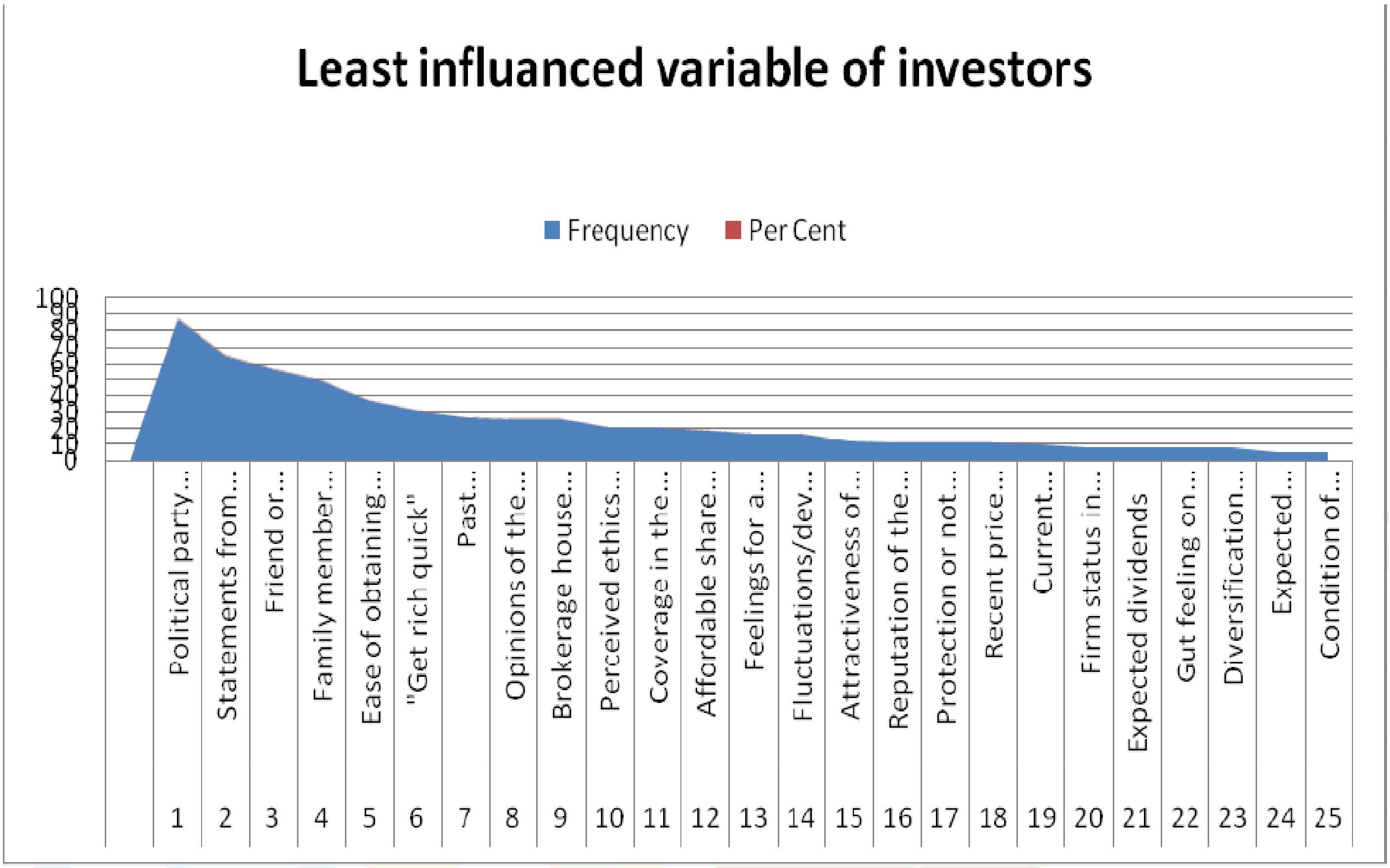



The first Table and graph is that most of the variables that were rated important are classic wealth maximization criteria such as "*expected corporate earnings*", "*condition of financial statements*", or "*firm status in the industry*". It was generally expected that these factors would be high on the list of criteria considered in choosing stock investments, especially given the fact that the survey was completed by experienced investors who survived even though they have been hit hard by the "bubble burst" of the Indian stock exchange that was initialized at the end of 2010. Secondly, apart from the wealth criteria, surprisingly more than half of the respondents considered no other factor important indicating that investors truly employ diverse decision criteria when choosing stocks. Third, it appears that despite the big blow to investors from the 2010 in the month of June Indian stock market breadth was very low , speculative factors like "*get rich quick*", "*recent price movements in the firm's stocks*", and "*affordable share price*" influenced significantly only 1/3 of the respondents. Finally, "*statements from politicians and government officials*", "*ease of obtaining borrowed funds*" and "*political party affiliation*" on which the pre-2010 with reference to countries political chaos, bubble thrived on, were either totally unimportant to most experienced stock investors and only a very small percentage of them considers them significant investment decision criteria. Table 2 ranks the variables by the frequency with which respondents ignore them when making stock purchases. As mentioned earlier, experienced investors rely mostly on wealth maximization criteria and they are self-reliant ignoring inputs of family members, politicians, and coworkers when purchasing stocks.

**TABLE 2: FREQUENCY DISTRIBUTION OF VARIABLES THAT LEAST INFLUENCE INVESTOR DECISIONS**

| Rank | Item | Frequency | Per Cent |
|---|---|---|---|
| i. | Political party affiliation | 87 | 58.0% |
| ii. | Statements from politicians & governmental officials | 65 | 43.3% |
| iii. | Friend or coworkers recommendations | 56 | 37.3% |
| iv. | Family member opinions | 49 | 32.7% |
| v. | Ease of obtaining borrowed funds | 37 | 24.7% |
| vi. | "Get rich quick" | 31 | 20.7% |
| vii. | Past performance of the firm’s stock | 27 | 18.0% |
| viii. | Opinions of the firm’s majority stockholders | 26 | 17.3% |
| ix. | Brokerage house recommendation | 26 | 17.3% |
| x. | Perceived ethics of firm | 21 | 14.0% |
| xi. | Coverage in the press | 21 | 14.0% |
| xii. | Affordable share price | 19 | 12.7% |
| xiii. | Feelings for a firm’s products & services | 17 | 11.3% |
| xiv. | Fluctuations/developments in the indices of the major markets | 17 | 11.3% |
| xv. | Attractiveness of non-stock investments | 12 | 8.0% |
| xvi. | Reputation of the firm | 11 | 7.3% |
| xvii. | Protection or not of the investor | 11 | 7.3% |
| xviii. | Recent price movements in firm’s stock | 11 | 7.3% |
| xix. | Current economic indicators | 10 | 6.7% |
| xx. | Firm status in industry | 8 | 5.3% |
| xxi. | Expected dividends | 8 | 5.3% |
| xxii. | Gut feeling on economy | 8 | 5.3% |
| xxiii. | Diversification needs | 8 | 5.3% |
| xxiv. | Expected corporate earnings | 5 | 3.3% |
| xxv. | Condition of financial statements | 5 | 3.3% |

Sources: Analysis




Next, we analyzed the 25 variables using the *varimax* algorithm of orthogonal rotation, which is a very commonly used method of factor analysis. Evaluation of the resulting categories and rankings is highly subjective since factor analysis identifies only the homogeneous cluster groups. The “factor” categories displayed in Table 3 were found to be heavily loaded by a specific subset of the 25 variables in each particular case. The assignment of the factors was undertaken by the factor analysis. However, considerable subjective judgment and common sense was also employed to clarify discrepancies. Finally, the percentage frequencies of each set of variables were added together, and the resulting sum serves as a “weight of significance” attributed to each of the identified categories

**TABLE 3: FACTORS INFLUENCING THE EQUITY SELECTION PROCESS OF NON-INSTITUTIONAL INVESTORS**

| LABEL | VARIABLES | Percentage |
|---|---|---|
| **Accounting Information** | Condition of financial statements | 58.0% |
| **2.55** | Expected corporate earnings | 72.0% |
| | Expected dividends | 3.3% |
| | Firm and Industry | 55.53 |
| | Affordable Share Price | 36.00 |
| | Past performance of stock | 30.7% |
| **Subjective/Personal** | Get rich quick | 37.3% |
| **2.13** | Feelings for a firm’s products & services | 47.3% |
| | Protection or not of the investor | 46.7% |
| | Gut feeling on the economy | 30.7% |
| | Perceived ethics of firm | 37.3% |
| | Political party affiliation | 13.3% |
| **Neutral Information** | Coverage in the press | 20.0% |
| **2.10** | Recent price movements in a firm’s stock | 40.0% |
| | Statements from politicians & governmental officials | 18.7% |
| | Fluctuations/developments in the indices of the major markets | 32.0% |
| | Current economic indicators | 32.7% |
| | Reputation of the firm | 48.0% |
| **Advocate Recommendation** | Brokerage house recommendation | 23.3% |
| **0.89** | Family member opinions | 17.3% |
| | Friends or coworkers recommendations | 16.0% |
| | Opinions of the firm’s majority stockholders | 32.0% |
| **Personal Financial Needs** | Diversification needs | 24.7% |
| **0.71** | Attractiveness of non-stock investments | 27.3% |
| | Ease of obtaining borrowed funds | 18.7% |

Sources: Analysis: Formerly, it is safe to assume that the data obtained are indeed closely correlated with the non-institutional behavior of active investors in the Bombay Stock Exchange (BSE). The factor category displaying the highest significance is "*Accounting Information*" with a weight of 2.55. This was expected since, as mentioned earlier, the vast majority of the study's respondents were experienced stockholders. This result also indicates that skilled investors rely and emphasize rational decision making criteria, assigning a high value to this particular set of variables.

The next factor category with the highest loading was surprisingly, the criteria category of "*Subjective/Personal*" with a weight of 2.13. One can see clearly that the participant's responses reflect the overall elation that prevails in the investor community in India, more than ever during the bull market period of pre-2009-2010. Particularly not worth mentioning and telling is the fact that 36.37 percent of the respondents considered their desire to "*get rich quick*" as an "*Act on*" influence factor. The factor category of "*Neutral Information*" received a weight of 2.10. Rationally speaking, the set of variables contained in this category are thought to constitute valuable information for a prospective investor. It is noteworthy that this category is ranked below the "*Subjective/Personal*" one, and this may be due to the lack of widespread knowledgeable information about a particular investment alternative, along with the resulting herd-behavior during the bull pre-2009 years, that contributed to the relative neglect of consideration of significant traditional variables. Finally, the last two categories of "*Advocate Recommendation*" and "*Personal Financial Needs*" received weights of 0.89 and 0.71 respectively. This fact shows that equity investors in the Bombay Stock Exchange consider themselves quite independent of any influences outside

**CONCLUSION**

This study tested the doctrine of the behavioral finance theory on the factors that influence investment choices under conditions of uncertainty. The analysis performed on the data collected appears to give a fairly accurate view of the average equity investor in the Bombay Stock Exchange (BSE). Experienced and knowledgeable investors would readily admit that the structure and relative weights of the chosen categories reflect on the average, a still unsophisticated and immature investor profile. The results revealed by our sample of 200 respondents confirm that there seems to be a certain degree of correlation between the factors that behavioral finance theory and previous empirical evidence identify as the influencing factors for the average equity investor, and the non-institutional behavior of active investors in the Bombay Stock Exchange (BSE) influenced by the overall trends prevailing at the time of the survey in the BSE

**LIMITATIONS OF THE STUDY**

1. Sample size is limited to 200 novice non-institutional investors in the Indian stock market. The sample size may not adequately represent the inter sample size may not adequately represent the

international market.

2. The simple sampling techniques are due to time and financial constraints.

3. This study has not been conducted over an extended period of time having both ups and downs of stock market conditions which a significant factor influence on investor' s of various factors.

4. This study considered only BSE experienced investors.

## SUGGESTIONS FOR FUTURE RESEARCH

This study examined the factors that appear to exercise the greatest influence on the non-institutional stock investor, and included not only the factors investigated by preceding studies and derived from prevailing behavioral finance theories, but also introduced additional factors generated through personal interviews that have been found to influence the stockholders' investment decisions in India. Future research should attempt to authenticate the two questions that this paper addressed: First, what relative importance do decision variables and especially economic decision variables have for non-institutional investors making stock purchase decisions? Secondly, are there homogeneous clusters or groups of variables that form identifiable decision determinants that investors rely upon when making stock investment decisions? Cross national data collected from random samples of non-institutional stock investors with substantial holdings should attempt to validate this study's conclusions that non-institutional base their stock purchase decisions on economic priority criteria combined with many other diverse variables in its place of merely relying on a single integrated approach

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