

An Empirical Analysis of Factors Influencing Indian Individual Equity Investors' Decision Making and Behavior

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Abstract

The decision making process is a cognitive process which results in the selection of a course of action among several alternatives. Every decision-making process produces a final choice. The output can be an action or an opinion of choice. Investment decisions made today often are critical for financial security in later life, due to the potential for large financial loss and the high costs of revising or recovering from a wrongful investment decision. Most of the equity investors do not have the sufficient knowledge of basic economic concepts required to make investment decisions. To identify these factors the current study has applied factor analysis. After applying factor analysis it was found that all the 40 attributes are reduced to the following ten factors Individual Eccentric, Wealth Maximization, Risk Minimization, Brand Perception, Social Responsibility, Financial Expectation, Accounting information, Government & Media, Economic Expectation and Advocate recommendation factors.

Keywords: Indian Individual Equity Investor, Decision making, Factors Influencing.

1. Introduction

The decision making process is a cognitive process which results in the selection of a course of action among several alternatives. In this process, the emphasis is on thinking things through and also on weighing the outcomes and alternatives before arriving at a final decision. Every decision-making process produces a final choice. The output can be an action or an opinion of choice. Investment decisions made today often are critical for financial security in later life, due to the potential for large financial loss and the high costs of revising or recovering from a wrongful investment decision. Most of the equity investors do not have the sufficient knowledge of basic economic concepts required to make investment decisions. Thus, there is a need to conduct research on factors, other than knowledge, that could influence investment decisions. Lusardi and Mitchell (2006).

2. Investor Buying Decision Process

Investing in shares is like investing into ownership of a company, which no other investment instrument can give. Unlike any other investment instrument that either gives fixed income or meager returns and no ownership in the same, equity investment gives an opportunity to become a part of the company ownership and also gives regular returns on investment as dividend income or through appreciation in share price. Investing in equity also allows investor to enjoy the flexibility of staying invested as long as he/she wish to, take advantage of the price movements and thus utilize the liquidity. The figure 1 shows the steps or the process of individual investors' decision-making process of investment.

Insert Figure 1 here

Step 1: Investible Surplus: Generally, an individual earns more than he/she can spend. The amount of money an individual is able or willing to keep aside for investments is referred as surplus investible. The investible surplus plays a vital role in selecting from various asset classes as the minimum investment amounts differ and so do the risks and returns

Step 2: Sources of Investment Information search: At this stage, investor wants to find out the information about the financial products, return, risk involved and tax-benefit. Investor collects the information from different sources like Personal sources such as Family, friends, co-workers, and Public sources such as mass media and credit rating agencies.

Step 3: Evaluation of stocks: After collecting the information, investors arrive at some conclusion about which companies' stock can be purchased. At this stage, investor compares different stocks on set parameters, which he/she thinks required. The evaluation process varies from investor to investor. 40 items have been identified which influence the stock purchasing behavior of the investor. These attributes were categorized under five heads; namely, Personal & Financial needs attributes, Firm-Image of company attributes, Accounting Information of the company attributes, Neutral Information (general information about the company) attributes and Advocate Recommendation attributes

Eleven items correspond to Personal & financial needs; next eleven items correspond to Firm-Image; next seven items correspond to Accounting information; next seven items correspond to Neutral information; and the last four items correspond to Advocate recommendation. All the attributes are listed in table 1.

Insert Table 1 here

Step 4: Choosing a Stock: After evaluating the stock based on various factors the investor chooses the one.

Step 5: Purchasing a Stock: At this stage investor purchases the most preferred stock.

3. Review of Literature

Economic utility theory views the individual's investment decision as a tradeoff between immediate consumption and deferred consumption. The individual investor weighs the benefits of consuming today against the benefits that may be gained by investing unconsumed funds in order to enjoy greater consumption at some point in the future. If an individual chooses to defer consumption, he/she will, according to theory, select the portfolio that maximizes long-term satisfaction. The literature on utility theory does not typically address individual investor decision processes. Rather, it focuses on the development and refinement of macro models that explain aggregate market behavior. However, some empirical studies of individual investor behavior have examined utility theory constructs focusing on individual rather than aggregate investor profiles. Baker and Haslem (1974) found that dividends, expected returns and the firm's financial stability are critical considerations for individual investors. Baker, Hargrove and Haslem (1977) in their empirical study on risk/ return preferences of investors found that investors behave rationally, taking into account the investment's risk/return tradeoff. A relatively new financial sub-discipline, behavioral finance, has achieved impressive strides in explaining the behavioral aspects of investment decisions. The results of some empirical studies about factors influencing individual investor behavior have been reviewed for this particular study. Researchers gave a substantial attention to institutional investors, whereas less attention is given to the individual investors' behavior that is the emphasis of this research. However, almost all the previous studies have dealt with investors' behavior in industrialized countries (USA, UK, Canada). However, factors' influencing Indian individual equity investors' behavior has not been explored.

Aregbeyen & Mbadiugha (2011) study on Nigerian investor say 20 variable grouping under social, economical, psychological and cultural factors influences investment decisions. The ten most influencing variables based on the ranking of the investor are motivation by people who have attained financial security through share investment, future financial security, recommendations by reputable and trusted stock brokers, management team of the company, awareness of the prospects of investing in shares, composition of board of directors of the companies, recent financial performance of the company, ownership structure of the company and reputable predictions of future increment in share value. Social factor was ranked as most influencing factor next to economic factors followed by psychological and cultural factors.

Kabra, Mishra & Dash (2010) studied factors, which affect individual investment decisions using factor analysis. Their study on Indian investors which focuses initially on 18 variables later reduced to 14 variables and then further enumerated into six component factors as Security, Opinion, Awareness, Hedging, Duration and Benefits. Alleyne and Broome (2010) have examined the investment decisions among students using the theory of planned behaviour and risk propensity among future investors. They say that the theory of planned behaviour is a significant predictor

of investment intentions. The findings further show that attitudes and referent groups (peers, family and significant others) and beliefs about potential obstacles and opportunities significantly predict intentions to invest. They also found that the influence of friends and relatives, and easy access to funds are significant predictors of investment intentions of students.

Hussein (2006) reports the factors influencing the UAE investor behavior on the Dubai Financial Market and Abu Dhabi Securities Market. The questionnaire included thirty-four items that belong to five categories, namely self-image/firm-image coincidence, accounting information, neutral information, advocate recommendation and personal financial needs. More than 50% of total respondents consider that six factors were most influencing factors on investment behavior. The most influencing factor by order of importance are : “expected corporate earnings”, “get rich quick”, “stock marketability”, “past performance of the firm’s stock”, “government holdings”, “the creation of the organized financial markets” (i.e. Dubai Financial Market and Abu Dhabi Securities Markets). Five factors were found to be the least influencing factors, where less than 10% of total respondents consider these factors as the least affecting factors on their behavior. The least influencing factor , by order of importance are : “expected losses in other local investments”, “minimizing risk”, “expected losses in international financial markets”, “family member opinions” and “gut feeling on the economy”. The most influencing group, by order of importance are: accounting information, self-image/ firm-image coincidence, neutral information, advocate recommendation and personal financial needs. Two factors namely religious reasons and the family member opinions unexpectedly had the least influence on the behavior of the UAE investor.

Merikas *et al.*,(2003) adopted a modified questionnaire to analyze factors influencing Greek investor behavior on the Athens Stock Exchange. The results indicate that individuals base their stock purchase decisions on economic criteria combined with other diverse variables. Their results reveal that most of the variables that were rated important are “*expected corporate earnings*”, “*condition of financial statements*”, or “*firm status in the industry*”. It is 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 Greek stock exchange that was initialized at the end of 1999. Secondly, apart from the wealth criterion, surprisingly more than half of the respondents consider 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 1999 Greek stock market collapse, speculative factors like “*get rich quick*”, “*recent price movements in the firm’s stocks*”, and “*affordable share price*” influence significantly only 1/3 of the respondents. Finally, environmental criteria like “*coverage in the press*”, “*statements from politicians and government officials*”, “*ease of obtaining borrowed funds*” and “*political party affiliation*” on which the pre-1999 bubble thrived, are either totally unimportant to most experienced stock investors and only a very small percentage of them considers them significant investment decision criteria.

Shanthikumar and Malmendier (2003) tried to answer the question: Are small investors naïve?. They found that large investors generate abnormal volumes of buyer-initiated trades after a positive recommendation only if the analyst is unaffiliated. Small traders exert abnormal buy pressure after all positive recommendations, including those of affiliated analysts. Hodge (2003) analyzed investors’ perceptions of earnings quality, auditor independence, and the usefulness of audited financial information. He concluded that lower perceptions of earnings quality are associated with greater reliance on a firm’s audited financial statements and fundamental analysis of those statements when making investment decisions.

Krishnan and Booker (2002) analyze the factors influencing the decisions of investor who use analysts’ recommendations to arrive at a short-term decision to hold or sell a stock. The results indicate that a strong form of the analyst summary recommendation report, i.e., one with additional information supporting the analysts’ position further, reduces the disposition error for gains and also reduces the disposition error for losses.

Nagy and Obenberger (1994) examined factors influencing investor behavior. They developed a questionnaire that included 34 questions. Their findings suggested that classical wealth – maximization criteria are important to investors, even though investors employ diverse criteria when choosing stocks. Contemporary concerns such as local or international operations, environmental track record and the firm’s ethical posture appear to be given only cursory consideration. The recommendations of brokerage houses, individual stockbrokers, family members and co-workers go largely unheeded. Many individual investors discount the benefits of valuation models when evaluating stocks.

Epstein (1994) examines and reports the demand for social information by individual investors. The results indicate the usefulness of annual reports to corporate shareholders. The results also indicate a strong demand for information about product safety and quality, and about the company's environmental activities. Furthermore, a majority of the shareholders surveyed also want the company to report on corporate ethics, employee relations and community involvement.

The current study considers three attributes not considered by published studies, namely Bonus shares issued in the past, Expected issue of bonus shares and Expected merge with big company. The developed questionnaire includes 40 items under five heads. The current research is carried out to address two issues one, are there homogeneous groups of variables that form identifiable constructs (within the five categories of attributes identified) that investors rely upon while making equity investment decisions? Two, what relative importance does decision variables have for individual investors making stock purchase decisions?

4. Objectives of the Study

To analyze and identify the factors influencing the Indian individual equity investors while choosing a stock for investment.

5. Research Methodology

5.1 Sample Selection

Various stock broking firms were approached for the purpose of selecting the sample. But all the stock broking firms have declined to share the contact details of their customers (equity investors) as they assumed that their customers would be annoyed if they get any call seeking their personal and investment related information. Stock broking companies where personal contacts were available have obliged to share 1500 customers' details who make equity investments at regular intervals, to which the questionnaire has been sent to their inbox or personally administered.

5.2 Sample Size

The questionnaire was sent to 1500 individual equity investors, out of which 891 investors have responded. The response rate was 59.4 percent.

5.3 Statistical Tools and Techniques

To study the factors influencing the behavior of the Individual equity investors' factor analysis techniques is applied. Factor analysis is primarily used for data reduction and summarization. In research there may be a large number of variables/attributes, most of which are correlated and which must be reduced to a manageable level. Relationships among sets of many interrelated attributes are examined and represented in terms of a few underlying factors.

Cronbach's-alpha test is used to test the reliability of the 40 items, which have been categorized under five heads.

Scaling Technique: The investors were asked to rate the 40 attributes using Likert five-point scale. 1 - Highly important to 5 – not at all important.

6. Analysis and Discussion

6.1 Reliability:

To test the reliability of the measures of all 40 attributes was assessed by the use of Cronbach's alpha. As a general rule, a coefficient greater than or equal to 0.5 is considered acceptable and a good indication of construct reliability. The Cronbach's alpha for all the 40 attributes is 0.878. The Cronbach's alpha for the five categories, namely, Personal & financial needs, Firm-Image, Accounting Information, Neutral Information and Advocate Recommendation is 0.721, 0.728, 0.839, 0.680, 0.598 respectively is shown in table 2. As the Cronbach's alpha of all the five sets is greater 0.5 so it is a good indication of construct reliability

Insert Table 2 here

6.2 Analysis of Factors Influencing the Indian Individual Equity Investor

Investors were asked to rank the following factors: Personal and Financial needs, Firm-Image, Accounting Information, Neutral Information and Advocate Recommendation in their order of preference they consider important while choosing a stock for investment. Table 3 describes first preference and Weighted Mean Value (WMV) of the ranks of all the respondents. It was found that the WMV for the accounting information of the company has

the highest followed by the personal and financial needs of the investor which is 3.74 and 3.73 respectively. 370(42%) of investors stock purchases are influenced by accounting information of the company, 349(39%) of the investors stock purchases are influenced by personal and financial needs, 37 (4%) of the investors stock purchases are influenced by information related to firm-image of the company, 99(11%) of the investors stock purchases are influenced by the recommendation of friends/peer group or brokers advice. 36(4%) of the investors are influenced by the neutral or general information of the company.

Insert Table 3 here

6.3 Most Influencing Attributes

Table 4 shows the ranking of the attributes based on the frequency of *highly important* rating given by the investor while making stock purchases. Based on the ranks it can be observed that all the 7 attributes of accounting information category fall in the top 12 ranks, by this it can be inferred that equity investors consider that accounting information category attributes are most influencing when compared to the other category of attributes. The following five factors *Recent price movement in a firm's stock*, *Stock marketability*, *Fluctuations/developments in the stock index*, *Expected corporate earnings* and *Past performance of the firm's stock* influence significantly, 30 percent or more investors. Attribute *Recent price movements in a firm's stock* is rated as highly important by the 34.46% of the investors, next to stock marketability which is rated as highly important by the 33.56% of the equity investors. As expected these factors were 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 stock exchange that began at the start of 2008. Accounting information group of attributes significantly influenced more than 25% of the investors which again reaffirm that the investors are experienced and give importance to the fundamentals of the stock while choosing it for investment. Attributes such as *Increase of the firm's involvement in solving community problems*, *Statement from the government officials*, *Attractiveness of non investment stock* are considered highly important by a very small percentage i.e., around 5% of investors while picking the stock for investment.

Insert Table 4 here

6.4 Least Influencing Attributes

Table 4 shows the ranking of the attributes based on the frequency of *not at all important* rating given by the investor while making stock purchases. Religious factor ranks first among the least influencing the behavior of the investor. 162 (18.18%) of equity investors consider religious factors are the least influencing attribute while investing in stock, in contrary to the common belief of Indians consider it is auspicious to trade or invest on diwali for which the Indian stock market is open for atleast an hour. Apart from this belief, Indians invest or purchase gold on dhanateras a day following after diwali. Opinion of family members is considered to be least influencing by 11.45 percent of the investors and friend or co-workers' opinion is also considered as least influencing the behavior of the 10.44 percent of investors. Attractiveness of non-investment stock is also considered the least influencing factor by the 10.44 percent of investors, which means the attractive interest rates and other financial instruments do not have any impact on the investor. It is surprising to note that all the attributes related advocate recommendation except brokers recommendation are among the ten least influencing attributes.

The data for each of the five sub-groups were factor analyzed using Principal Component Analysis, with the objective of identifying the factors that influence the individual equity investors' behavior in selecting the scrip for investment.

6.5.1 Influence of Personal & Financial needs attributes on investors behavior

The appropriateness of factor analysis was assessed by checking the significance of Bartlett test of sphericity and by examining sampling adequacy through Kaiser-Meyer- Olkin (KMO) Measure of Sampling Adequacy (Hair, *et al*, 2006). Kaiser & Rice (1974) recommends accepting values greater than 0.5 as acceptable. For the data collected, the value is 0.717, which falls in the range of good, and based on this value it can be interpreted that there is no error in the 71.7% of the sample and the rest 28.3% of the sample there may be a possibility of error. Bartlett's Test Of Sphericity is significant (.000) support the validity of the factor analysis of the data set. Principal component analysis

along with Varimax rotation was employed for extracting factors. The criteria adopted for deciding the number of factors was, as given by Kaiser and Rice (1974), the common factors with an eigenvalue greater than 1 should be considered. Retaining only the factors with eigen values greater than one (Kaiser's criterion). Based on Varimax Rotation with Kaiser Normalisation, three factors have emerged. Each factor is constituted of all those variables that have factor loadings greater than or equal to 0.5. The following three attributes Ease of obtaining borrowed funds, Feelings for a firm's products and services and Gut feeling on the economy had less than 0.5 factor loading so they have been excluded while grouping them in factors. Thus P1, P2 and P3 constituted the first factor. The researcher conceptualized this factor as "Individual Eccentric"; P5, P6 constituted the second factor, this was conceptualized as "Wealth Maximization"; P8, P9, and P10 constituted the third factor and were conceptualized as "Loss minimization". Thus, after rotation, factor one (Individual Eccentric) accounts for 18.255% of the variance; factor two (Wealth Maximization) accounts for 17.148% of variance and factor three (Loss Minimisation) accounts for 16.930% of variance and all 3 factors together explain for 52.330% of variance. Hair, *et al* (2006) consider any solution with over 50 per cent of the explained variance to be satisfactory from a social sciences standpoint where information is often less precise. The identified factors with the associated attributes and factor loadings, percentage of variance explained by each factor, Eigen values and Cronbach alpha of each factor emerged are shown in table 5.

Insert Table 5 here

6.5.2 Influence of Firm-Image attributes on investors behavior

The current study considers three attributes not considered by published studies, namely *Bonus shares issued in the past*, *Expected issue of bonus shares* and *Expected merge with big company*.

The Kaiser-Meyer- Olkin (KMO) Measure of Sampling Adequacy for the firm-Image set of attributes was 0.778, which falls in the range of good, and based on this value it can be interpreted that there is no error in the 77.8% of the sample and the rest 22.2% of the sample there may be a possibility of error. Bartlett's Test Of Sphericity is significant (.000) support the validity of the factor analysis of the data set. Principal component analysis along with Varimax rotation was employed for extracting factors. Retaining only the factors with eigen values greater than one (Kaiser's criterion), three factors have emerged. Each factor is constituted of all those variables that have factor loadings greater than or equal to 0.5. Thus, F1, F2, F3 and F4 constituted the first factor. The researcher conceptualized this factor as "Brand Perception"; F5, F6 and F7 constituted the second factor and this was conceptualized as "Social Responsibility"; F8, F9, F10 and F11 constituted the third factor and were conceptualized as "Financial Expectation". Thus, after rotation, factor 1 (Brand Perception) accounts for 17.729% of the variance; factor 2 (Social Responsibility) accounts for 17.573% of variance and factor 3 (Financial Expectation) accounts for 16.469% of variance and all 3 factors together explain for 51.772% of variance is considered satisfactory according to Hair, *et al* (2006). The identified factors with the associated attributes and factor loadings, percentage of variance explained by each factor, Eigen values and Cronbach alpha of each factor emerged are shown in table 6.

Insert Table 6 here

6.5.3 Influence of Accounting Information attributes on investors behavior

The Kaiser-Meyer- Olkin Measure of Sampling Adequacy for the Accounting Information set of attributes value is 0.860, which falls in the range of good, and based on this value it can be interpreted that there is no error in the 86% of the sample and the rest 14% of the sample there may be a possibility of error. Bartlett's Test Of Sphericity is significant (.000) support the validity of the factor analysis of the data set. Principal component analysis along with Varimax rotation was employed for extracting factors. Retaining only the factors with eigen values greater than one (Kaiser's criterion), only one factor has emerged. The factor is constituted of all those attributes that have factor loadings greater than or equal to 0.5. Thus, A1, A2, A3, A4, A5, A6, and A7 constituted the factor 1. The researcher conceptualized this factor as "Accounting Information". Since only one factor is extracted the solution cannot be rotated. The only one factor which has emerged explains for 51.080% of variance is considered satisfactory according to Hair, *et al* (2006). The identified factor with the associated attributes and factor loadings, percentage of variance explained by the factor, Eigen value and Cronbach alpha of the factor emerged are shown in table 7.

Insert Table 7 here

6.5.4 Influence of Neutral Information attributes on Investors Behavior

The Kaiser-Meyer- Olkin (KMO) Measure of Sampling Adequacy for the Neutral Information set of attributes, the value is 0.767, which falls in the range of good, and based on this value it can be interpreted that there is no error in the 76.7% of the sample and the rest 23.3% of the sample there may be a possibility of error. Bartlett's Test Of Sphericity is significant (.000) support the validity of the factor analysis of the data set. Principal component analysis along with Varimax rotation was employed for extracting factors. Retaining only the factors with eigen values greater than one (Kaiser's criterion), three factors have emerged. Each factor is constituted of all those variables that have factor loadings greater than or equal to 0.5. Thus, N1, N2, N3 and N4 constituted the first factor. The researcher conceptualized this factor as "Government & Media"; N5, N6 and N7 constituted the second factor and this is conceptualized as "Economic Expectation". Thus, after rotation, factor 1 (Government & Media) accounts for 26.002% of the variance and factor 2 (Economic Expectation) accounts for 23.198% of variance and the two factors together explain for 49.2% of variance is not considered satisfactory according to Hair, *et al* (2006). The identified factors with the associated attributes and factor loadings, percentage of variance explained by each factor, Eigen values and Cronbach alpha of each factor emerged are shown in table 8.

Insert Table 8 here

6.5.5 Influence of Advocate Recommendation attributes on Investors Behavior

The Kaiser-Meyer- Olkin (KMO) Measure of Sampling Adequacy for the Advocate Recommendation set of attributes, the value is 0.646, which falls in the range of good, and based on this value it can be interpreted that there is no error in the 64.6% of the sample and the rest 35.4% of the sample there may be a possibility of error. Bartlett's Test Of Sphericity is significant (.000) support the validity of the factor analysis of the data set. Principal component analysis along with Varimax rotation was employed for extracting factors. Retaining only the factors with eigen values greater than one (Kaiser's criterion), only one factor has emerged. In the current study it was found R1 (Brokers recommendation) loading was found to be 0.488, which is less than 0.5 so it has been excluded. The factor is constituted of all those attributes that have factor loadings greater than or equal to 0.5. Thus, R2, R3 and R4 constituted the only one factor. The researcher conceptualized this factor as "Advocate Recommendation". Since only one factor is extracted the solution cannot be rotated. The only one factor which has emerged explains for 46.244% of variance. In the current case the variance explained is not satisfactory as per Hair, *et al* (2006). The identified factor with the associated attributes and factor loadings, percentage of variance explained by the factor, Eigen value and Cronbach alpha of the factor emerged are shown in table 9.

Insert Table 9 here

7. Summary and Conclusion

Investment decision process is considered critical decision for every investor, especially when investing in equities as it involves high risk and the returns are not certain. While choosing a particular stock to make an investment, 40 attributes have been identified that influence the investor buying decision process. The most influencing attributes were identified and ranked based on the frequency of *highly important* rating given by the investor. The most influencing attributes were identified and ranked based on the frequency of *not at all important* rating given by the investor. To identify factors influencing the behavior of Indian individual equity investors the current study has applied factor analysis. After applying factor analysis it was found that all the 40 attributes are reduced to the following ten factors namely Individual Eccentric, Wealth Maximization, Risk Minimization, Brand Perception, Social Responsibility, Financial Expectation, Accounting information, Government & Media, Economic Expectation and Advocate recommendation factors.

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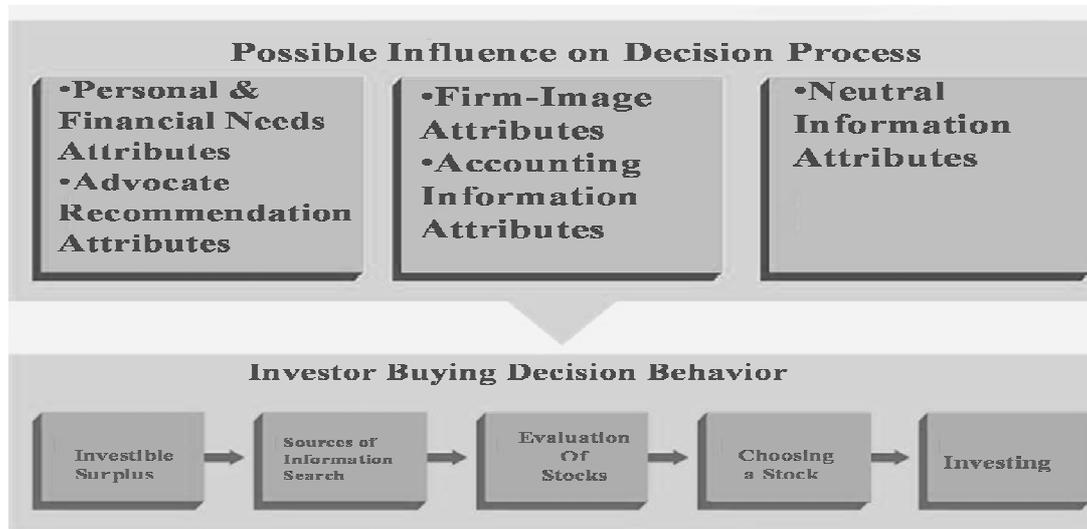


Figure 1: Investor Buying Decision Behavior

Table 1: List of Attributes Influencing Investors

No		Personal & Financial Needs Attributes	No		Firm –Image Attributes
1	P1	Religious reasons	12	F1	Reputation of the firm
2	P2	Attractiveness of non-stock invest	13	F2	Reputation of the firm’s shareholders
3	P3	Diversification needs	14	F3	Firm status in industry
4	P4	Ease of obtaining borrowed funds	15	F4	The creation of the organized Fin. Mkts
5	P5	Minimizing risk	16	F5	Firms affiliation to a political party
6	P6	“Get rich quick”	17	F6	Perceived ethics of firm
7	P7	Feelings for a firm’s products and services	18	F7	Increase of the firm’s involvement in solving community Problems
8	P8	Expected losses in Int. Fin. Mkts	19	F8	Adherence to Environmental norms
9	P9	Tax consequence	20	F9	Bonus shares issued in the past
10	P10	Expected losses in other local investments	21	F10	Expected issue of bonus shares
11	P11	Gut feeling on the economy	22	F11	Expected to merge with big co.
		Accounting Inf. Attributes			Neutral Information Attributes
23	AI1	Stock Marketability	30	NI1	Government holdings
24	AI2	Expected corporate earnings	31	NI2	Information obtained from the internet
25	AI3	Condition of financial statements	32	NI3	Fluctuation in the stock index
26	AI4	Dividends paid	33	NI4	Coverage in the press
27	AI5	Affordable share price	34	NI5	Statements from government officials
28	AI6	Expected Dividends	35	NI6	Current economic indicators
29	AI7	Past performance of the firm’s Stk	36	NI7	Recent price movement in a firm’s stock
		Advocate Recommendation Attributes			
37	R1	Broker recommendation			
38	R2	Family member opinions			
39	R3	Friend or coworker recommendations			
40	R4	Opinions of the firm’s majority stockholders			

Table 2: Reliability (alpha) of the attributes

Categories	Cronbach's alpha
All the attributes	0.878
Personal and Financial Needs	0.721
Firm-Image of the company	0.728
Accounting Information of the company	0.839
Neutral Information (general information about the Co.	0.680
Recommendation (of friends and peer group)	0.598

Table 3: Importance of Attributes

Categories of Attributes	WMV	Rank	1 st Preference
Accounting Information of the company	3.74	1	370(42%)
Personal and Financial Needs	3.73	2	349(39%)
Firm-Image of the company	3.33	3	37(4%)
Recommendation (of friends and peer group)	2.34	4	99(11%)
Neutral Information (general information about the Co.)	1.85	5	36(4%)

Table 4: Frequency Distribution of Attributes that Significantly influencing & Least influencing the Investors Decisions

Significantly Influencing			Attributes	Least Influencing		
Freq.	Percent	Rank		Freq.	Percent	Rank
307	34.46	1	Recent price movement in a firm's stock	75	8.42	8
299	33.56	2	Stock marketability	54	6.06	19
272	30.53	3	Fluctuations in the stock index	60	6.73	16
267	29.97	4	Expected corporate earnings	61	6.85	15
263	29.52	5	Past performance of the firm's stock	56	6.29	18
254	28.51	6	Condition of financial statement	46	5.16	22
252	28.28	7	Current economic indicators	37	4.15	24
233	26.15	8	Reputation of the firm	37	4.15	24
203	22.78	9	Dividends paid	68	7.63	12
198	22.22	10	Firms status in the industry	16	1.80	26
193	21.66	11	Affordable share price	61	6.85	15
190	21.32	12	Expected dividends	54	6.06	19
135	15.15	13	Minimizing risk	63	7.07	13
124	13.92	14	Expected issue of bonus shares	69	7.74	11
114	12.79	15	Reputation of the firm's share holders	37	4.15	24
112	12.57	16	Government holdings	61	6.85	15
111	12.46	17	Expected to merge with big company	75	8.42	8
109	12.23	18	Creation of the organised financial markets	36	4.04	25
105	11.78	19	Ease of obtaining borrowed funds	75	8.42	8
99	11.11	20	Bonus shares issued in the past	51	5.72	20
90	10.10	21	Tax consequence	75	8.42	8
90	10.10	22	Broker recommendation	63	7.07	13
84	9.43	23	Diversification needs	42	4.71	23
84	9.43	23	Get rich quick	57	6.40	17
84	9.43	23	Expected losses in international financial markets	78	8.75	7
84	9.43	23	Opinion of the majority of the share holders	78	8.75	7
82	9.20	24	Gut feeling on the economy	62	6.96	14

79	8.87	25	Adherence to environmental norms	56	6.29	18
78	8.75	26	Feelings for a firm's products and services	51	5.72	20
78	8.75	26	Expected losses in other local investments	71	7.97	10
75	8.42	27	Religious factors	162	18.18	1
75	8.42	27	Friend or co-workers opinion	93	10.44	3
69	7.74	28	Information obtained from the net	75	8.42	8
68	7.63	29	Perceived ethics of the firm	48	5.39	21
66	7.41	30	Family members opinion	102	11.45	2
61	6.85	31	Firms affiliation to the political party	88	9.88	4
60	6.73	32	Coverage in the press	72	8.08	9
51	5.72	33	Attractiveness of non investment stock	93	10.44	3
51	5.72	33	Statement from the government officials	84	9.43	5
46	5.16	34	Increase of the firm's involvement in solving community problems	83	9.32	6

Table 5: Identification of Personal & Financial Needs factors

Factors	Eigen Values	% of Var. Explained	Factor Loadings	Attributes	Cronbach Alpha
Individual Eccentric	2.088	18.255	0.769	Religious factors	0.641
			0.830	Attractiveness of non investment stock	
			0.621	Diversification needs	
Wealth maximization	1.886	17.148	0.735	Minimizing risk	0.510
			0.748	Get rich quick	
Loss minimization	1.862	16.930	0.712	Expected losses in international financial markets	0.642
			0.763	Tax consequence	
			0.724	Expected losses in other local investments	

Table 6: Identification of Firm-Image factors

Factors	Eigen Values	% of Var. Explained	Factor Loadings	Attributes	Cronbach Alpha
Brand Perception of the Company	1.950	17.729	0.591	Reputation of the firm	0.607
			0.547	Reputation of the firms shareholders	
			0.747	Firms status in the Industry	
			0.665	Creation of organized financial markets	
Social Responsibility	1.933	17.573	0.702	Firms affiliation to a political party	0.551
			0.666	Perceived ethics of the firm	
			0.690	Involvement of firm in solving community problems	
Financial Expectation	1.812	16.469	0.617	Bonus shares issued in the past	0.636
			0.686	Expected issue of bonus shares	
			0.690	Expected to merge with big company	
			0.521	Adherence to the environmental norms	

Table 7: Identification of Accounting Information factors

Factors	Eigen Values	% of Var. Explained	Factor Loadings	Attributes	Cronbach Alpha
Accounting Information	3.576	51.080	0.776	Dividends paid	0.839
			0.756	Expected dividends	
			0.737	Condition of financial statement	
			0.736	Expected corporate earnings	
			0.695	Affordable share price	
			0.666	Past performance of the firm's stock	
			0.626	Stock marketability	

Table 8: Identification of Neutral Information attributes

Factors	Eigen Values	% of Var. Explained	Factor Loadings	Attributes	Cronbach Alpha
Government & Media	1.820	26.002	0.685	Government holdings	0.592
			0.787	Information obtained from internet	
			0.541	Fluctuations in the stock market	
			0.555	Coverage in the press	
Economic Expectation	1.624	23.198	0.713	Statement from the government officials	0.544
			0.751	Current economic indicators	
			0.619	Recent price moments in the price of the stock	

Table 9: Identification of Advocate Recommendation factors

Factors	Eigen Values	% of Var. Explained	Factor Loadings	Attributes	Cronbach Alpha
Advocate Recommendation	1.850	46.244	0.802	Friend/Coworker recommendation	0.623
			0.789	Family members opinion	
			0.588	Opinion of the firms majority stockholders	