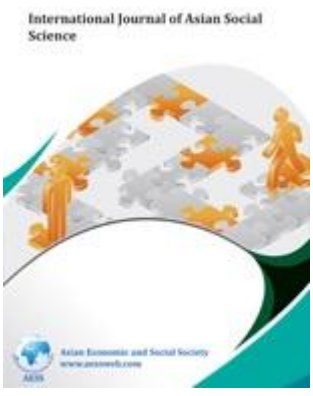
Online Publication Date: 1st July, 2012
Publisher: Asian Economic and Social Society



Factors Influencing Individual Investor Behaviour in Karachi

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Citation: Sania Usmani (2012) "Factors Influencing Individual Investor Behaviour in Karachi", International Journal of Asian Social Science, Vol. 2, No. 7, pp. 1033-1047.

International Journal of Asian Social Science, 2(7), pp.1033-1047.

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Abstract

Previous studies have examined motivation from economic perspectives or studied relationships between economic, behavioral, demographic & lifestyle variables but examination of various utility maximization and behavioral variables taken together provides a complete understanding of the investment decision process. This study incorporated this concept by taking 30 variables from diverse decision criteria including contemporary concerns. Results revealed seven homogenous groups among these 30 variables which were grouped into seven factors that address major investor considerations. The findings suggest that individual's base their stock purchase decisions on wealth-maximization criteria combined with past and present stock performance along with other diverse variables; they do not rely on a single approach.

Keywords: Behavior, Investor, Behavioral, Stock Market, Factors
JEL Codes: G11

Introduction

The individual investment decision in economic utility theory is viewed as a tradeoff between instant consumption and late consumption. The individual investor evaluates the benefits of consuming today against the benefits that would be gained by investing unconsumed funds in order to obtain greater consumption in the future. If the individual chooses to delay consumption he will select the portfolio that will maximize his enduring satisfaction. The essence of the utility theory axiomated by Neumann and Morgenstern (1947) state that investors are completely rational, deal with complex choices, are risk-averse and want to maximize their wealth. According to utility theory individual investors select the portfolio that increases their expected utility measured in expected return while decreases the risks or losses. The literature on economic utility theory does not cater to the individual investor's decisions. Instead it focuses on macroeconomic models that explain aggregate market behavior (Nagy and Obenberger 1994). But in a less than perfect world, investors are bounded in their rationality. They do not have all relevant information, unlimited cognitive and mathematical capacities, besides their knowledge and experience is also limited (Hoffmann, Eije, and Jager, 2006).

A new financial sub discipline called behavioral finance has ignited a wave in explaining the behavioral aspects of investment decisions. It examines choice under uncertainty. In behavioral finance financial markets are studied using models which are less narrow than those given by expected utility theory and arbitrage

assumptions (Neumann and Morgenstern,1947).

Behavioral finance is a response to the difficulties faced by the traditional models in financial markets which argues that some financial phenomena can be understood using models in which agents (individual investors) are not fully rational**,** either because of preferences or because of mistaken beliefs. Behavioral finance focuses on how investors translate and act on information to take investment decisions. It also examines the investor behavior which leads to various market abnormalities. It is a rapidly growing field which focuses on the effect of psychology on the behavior of financial practitioners (Merikas, Andreas, George and Prasad, 2004; Al-Tamimi, 2006).

Substantial amount of attention has been given by researchers to the behavior and portfolio performance of institutional investors in the past whereas less attention has been given to the individual investor behavior (Baker and Haslem,1974; Prowse, 1990; Nagy and Obenberger, 1994; Venter, 2006). Individual investors participate in the stock market by purchasing and selling different stocks and it is very important to identify various economic and behavioral motivations that affect their purchasing decisions. Thus it is important to identify the factors which have the greatest influence on the individual stock investor. This study is an attempt to give insight into the behavior of individual investors i.e. which factors influence them to purchase stocks.

Specifically, two research questions have been addressed in this research.

- First, what relative importance do decision variables have for individual investors making stock purchase decisions?
- Second, are there homogeneous groups of variables that form identifiable constructs that investors rely upon when making equity investment decisions?

This study aims at exploring Pakistani investor's behavior, representing the first attempt to be undertaken in Karachi, Pakistan. It will give an insight to individual local investors; investment professionals/planners and companies listed in Karachi stock exchange. Understanding of behavioral processes of investors is essential for financial planners because it will help investment advisors plan appropriate asset allocation strategies for their clients. Investment professionals which deal with retail clients may incorporate important factors when gauging and addressing individual investor concerns. Besides, companies can make their future policies and strategies by focusing on these factors which attract investors and influence them to invest.

Literature Review

Empirical studies of the behavior of individual investors first appeared in the 1970s, (Lease, Lewellen and Schlarbaum; 1974) determined demographic characteristics, investment strategy patterns, information sources, asset holdings, market attitudes and perceptions, of the individual investor.

Baker and Haslem (1974) found that investors were of two distinct types, one who seek dividends and the others who seek capital appreciation. Investors who gave importance to dividends were older, females, and risk averse and did not seek a large increase in the value of their stock. While the second type concerned with capital appreciation were willing to sacrifice current dividends for future price appreciation.

Efficient Market Hypothesis (EMH) asserts that stock market prices reflect all publicly available information so that it is impossible to consistently attain abnormal returns using such information (Winsen, 1976). Winsen (1976) studied whether investor behavior is associated with such a flow of information or not. The findings supported the argument that investors in some firms misunderstand and/or misuse certain publicly available data items which results in their behavior not

being an adequate function of the flow of information coming in the stock market.

Falk and Matulich (1976) examined the relationship between some personal characteristics of a group of investors and a group of investment advisors, and the degree of risk attributed by them to various types of financial investments.

Baker, Hargrove and Haslem (1977) found that the relationship between risk and total return is positive but lesser than the relationship between risk and capital appreciation. It has been reduced by the negative risk-dividend relationship. As dividends and capital appreciation together sums to total return therefore the presence of a positive risk-total returns relationship even after negative risk-dividends means that the positive association between risk and expected return appears to be due to the impact of capital appreciation in investor expectations of total return. Also it means that lower risk investors seek high dividends while higher risk investors seek higher capital appreciation in growth stocks.

Barnewell (1987) found that individual investor behavior can be anticipated by lifestyle characteristics, occupation, risk aversion and control orientation. Barnwell characterized individual investors as belonging to either two extremes- active or passive in her lifestyle analysis.

According to Warren, Stevens and McConkey (1990), demographics are used to segment the market for financial and economic services but lifestyle characteristics help in identifying individual investor's financial needs more precisely. Besides differentiating between investor behavior types (active/passive), Lifestyle dimensions also help in differentiating between light and heavy investors in particular investments (i.e., stocks and bonds). The analysis revealed that respondents who had a light concentration of their investments in stocks and bonds could be described as volunteers and as dress-conscious while the heavy stock/bond investors did not get involved in community organizations and volunteer work.

Riley and Chow (1992) found that as wealth, income, education increases risk-aversion decreases and it also decreases with age but only up to a certain point. After 65 of age i.e. retirement, risk aversion increases with age.

Nagy and Obenberger (1994) examined the factors that have the greatest influence on the individual stock investor and found 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 are given only cursory consideration. The recommendations of brokerage houses, individual stock brokers, family members and coworkers go largely unheeded. Seven relatively homogenous groups of variables were formed that influence individual investor behavior which were neutral information, self image / firm image coincidence, classic, social relevance, accounting information, advocate recommendation, and personal financial needs. Thus one can say that investment decision process appears to incorporate a broader range of items than previously assumed.

Merikas, Andreas, George and Prasad (2004) studied the factors that appear to exercise the greatest influence on the individual stock investor in the Greek stock exchange. The most important variables were related to classic wealth maximization criteria. Environmental criteria like "coverage in the press", "statements from politicians and government officials" and "political party affiliation" were totally unimportant to most stock investors and they are self-reliant ignoring inputs of family members, politicians, and coworkers when purchasing stocks. Five factors were identified as Accounting Information, Personal Financial Needs, Subjective/Personal, Advocate Recommendation, and Neutral Information.

Hoffmann, Eije and Jager (2006) researched in Netherlands using theories of needs and conformity behavior on investors. The results indicated that besides satisfying the financial needs investors also strive to satisfy socially oriented needs. Hoffmann, et al. (2006) also found that individual investors give importance to financial gains but they also give importance to social interaction with other investors, and therefore enjoy investing as a free-time activity. Thus, this study followed an "extended" utility approach along with supporting behavioral finance, which states that investing offers both utilitarian and expressive benefits. Therefore investors display a palette of different needs besides the financial aspects of investing (Fisher and Statman, 1997; Statman, 1999; Statman, 2002; Statman, 2004).

Al-Tamimi (2006) researched factors which influence the UAE investor behavior on the Dubai Financial Market and Abu Dhabi Securities Market. The most influencing factors were past performance of the firm's stock, expected corporate earnings, government holdings, stock marketability, get rich quick, and the creation of financial markets. The least influencing factor were expected losses in international financial markets, expected losses in other local investments, family member opinions, minimizing risk, and gut feeling on the economy. Factor analysis made 5 factors: neutral information, accounting information, advocate recommendation, self-image / firm-image coincidence, and personal financial needs.

Sevil, Sen and Yalama (2007) aimed at understanding the decision processes of small investors trading in Istanbul stock exchange and found that investors are not completely rational as perceived by traditional finance theories.

Research Method & Data Collection

Specifically, two research questions have been addressed in this research.

- First, what relative importance do decision variables have for individual investors making stock purchase decisions?
- Second, are there homogeneous groups of variables that form identifiable constructs that investors rely upon when making equity investment decisions?

In order to answer the above research questions, 30 variables previously used by (Nagy and Obenberger, 1994 and Al-Tamimi, 2006) given in appendix, table 3.1, were used in the Pakistani market, particularly in Karachi. These variables included few from the traditional sphere i.e. utility theory or wealth maximization criteria e.g., expected dividends, expected corporate earnings, perceived risk, while others addressed more modern concerns such as firm's environmental record and perceived firm ethics. Few variables concerned with financial information such as Condition of Financial Statements and Recent Price Movements of Firm's Stock were also used.

Method of data collection

The study aimed at analyzing the behavior of individual investors/shareholders in Karachi Stock Exchange. The information was gathered from individual investors who purchase and sell stocks in the Karachi Stock Exchange. There are around 200 brokerage houses in Karachi, out of which 142 are active while the rest are inactive. Each active brokerage house has at least 400 individual investors thus giving a total population of around 57000 (142*400). The variables were used to identify important variables which influence individual investors when making stock purchase decisions and whether these variables can be grouped in homogenous sets that form identifiable constructs on which they rely when making equity investment decisions.

Sampling Technique, Sample Size & Instrument of Data Collection

Convenience based sampling was the technique used in this research in which respondents were selected based on convenience. Participants were asked to

evaluate the importance of 30 variables which influenced equity investment decisions. Respondents noted whether each variable was (1) A important item used to make investment decisions ("Act On"), (2) A secondary item ("Consider") or (3) An item ignored in the investment decision process ("No Influence"). It was a primary research thus data was collected through a questionnaire. 153 questionnaires were distributed to individual investors who invested in Karachi stock exchange and the response rate was 100%.

Validity and Reliability Test

In order to test the reliability of the instrument used, Cronbach Alpha was applied. Cronbach alpha measures the reliability of the different categories and consists of estimates of how much variation in scores of different variables is due to chance or random errors (Al-Tamimi, 2006). A coefficient greater than or equal to 0.5 is acceptable and a good indication of construct reliability. The sample size chosen for the reliability test was 40. The overall significance level of Cronbach's alpha came out to be 0.761, thus reliability is 76% and the instrument was reliable to be used further in the study.

Table 2

Cronbach Alpha	N of Items
.761	33

The variables were ranked according to how frequently they were found in each response category and used factor analysis to examine how they interacted. Factor analysis technique was used to determine whether there were underlying constructs that represented a combination of investor concerns.

Findings

In response to the first research question of this study, significant variables based on their frequency distributions were identified which influence individual investor's behavior. Table 3 in appendix lists 30 variables with frequencies which respondents considered to have significant influence on their stock purchase decisions. Some observations made were that most of the variables ranked significant were Classic wealth-maximization criteria such as Expected Dividends, Expected Corporate Earnings and Diversification Needs. Besides another criterion which was significant included the Performance of Stocks such as Expected Stock Market Performance, Recent Price Movements of Firm's Stock, Past Performance of Investor's Stock Portfolio, Current financial position, Condition of Financial Statements and Past Performance of Stock. Lastly, the sample respondents were more self reliant when considering which stocks to choose and ignore family members and friends/coworkers opinions but considered stock broker advices.

Table 4, in appendix, ranks the frequency distribution of variables least influence the investor's behavior. First, Social Relevance & image is apparently not important to investors which include Environmental Record, International Operations, Perceived Ethics of Firm and Local Operations. Second, they ignore inputs from family members and friends/coworkers when selecting stocks. While Data in Reports/Prospectuses and Exchange listings of companies were given only cursory considerations. It is evident that investors rely mostly on decision criteria predicted by classic economic utility theory. However, it is also clear that investors use diverse criteria, rather than a single approach.

The second focus of this research was to identify whether the variables most important to investors form homogenous groups or not. Factor analysis was applied to determine whether there are underlying constructs that signify a combination of investor concerns and Varimax Algorithm of Orthogonal Rotation was used. The labeling of the variables and the empirical factor formation and identification are rarely perfect, thus endurance is encouraged. Two variables were removed from factor analysis

because their Anti Image values (Measure of Sampling Adequacy; an extension of KMO), were less than 0.5 (i.e. 0.410 and 0.430). These variables were You/Yourself and Family Member Opinions. Removing these variables also improved KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) from 0.769 to 0.785 and Bartlett test of sphericity is rejected which means that the correlation matrix is not an identity matrix and thus there is an underlying structure among the variables. Table 5 shows the KMO and Bartlett values.

Table 5: Assumptions of factor Analysis: KMO & Bartlett tests.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure npling Adequacy.		.785
Bartlett's Test of icity	Approx. quare	1516.992
	df	378
	Sig.	.000

Seven factors/components were extracted based on "Principle Components" extraction method and threshold of Eigen value 1. Table 6 in appendix, represents the total variance explained by seven factors extracted. Component one explains 12.8% variation with 3.591 Eigen value, component two, 10.6%, 2.98, third component with 10.3% and 2.909, fourth component with 7.537% variation and 2.11 Eigen value, fifth component with 7.494% variance explained and Eigen value of 2.098, sixth component with 6.109% and 1.71 Eigen value and seventh component with 5.35% variation and 1.498 Eigen Value. Table 7 represents the Rotated Component Matrix which identifies seven factors with highest factor loadings of each variable in each factor. The first factor/component bearing 6 variables, tax consequences was omitted because it is cross loading in another component as well, thus 5 variables remaining.

Table 7: Rotated Component Matrix identifying seven factors with the highest factor loadings of each variable in each factor.

Rotated Component Matrix							
	Component						
	1	2	3	4	5	6	7
Local Operations	.726						
International Operations	.716						
Institutional Holdings	.669						
Environmental Record	.639						
Perceived Ethics Of Firm	.500						
Tax Consequences	.490			.455			
Competing Financial Needs							
Current Financial Position		.794					
Condition of Financial Statements		.715					
Exchange Listing		.632					
Data In Reports & Prospectuses		.591					
Past Performance of Investors Stock Portfolio			.780				
Past Performance Of Stock			.694				
Recent Price Movements Of Firms Stock			.675				
Expected Stock Market Performance			.635				
Gut Feeling On Economy			.533				
Expected Corporate Earnings							
Friend or Coworker Recommendation				.717			
Attractiveness of Non Stock Investments				.677			
Use of Valuation Equations					.692		
Current Economic Indicators					.690		
Time Before Funds are Needed					-.601		
Diversification Needs							
Affordable Share Price						.718	
Minimizing Risk						.558	
Expected Dividends						.476	
Stock Broker Recommendation							.810
Feelings For Firms Products And Services							.451

Table 8 shows the factors assessment summary to give clarity to the factors extracted. Each factor shows its own reliability score i.e. alpha along with the factor loadings of each variable in each of the seven factors.

Table 8: Factors Assessment Summary

Factors	**Factor Loadings**
Factor 1: Social relevance & Image **alpha=** (0.762)	
Local Operations	0.726
International Operations	0.716
Institutional Holdings	0.669
Environmental Record	0.639
Perceived Ethics Of Firm	0.5
Factor 2 : Accounting Information **alpha=** (0.752)	
Current Financial Position	0.794
Condition of Financial Statements	0.715
Exchange Listing	0.632
Data In Reports & Prospectuses	0.591
Factor 3: Stock Performance **alpha=** (0.774)	
Past Performance of Investors Stock Portfolio	0.78
Past Performance Of Stock	0.694
Recent Price Movements Of Firms Stock	0.675
Expected Stock Market Performance	0.635
Gut Feeling On Economy	0.533
Factor 4: Friend/Coworker Influence **alpha=** (0.679)	
Friend or Coworker Recommendation	0.717
Attractiveness of Non Stock Investments	0.677
Factor 5: Evaluation **alpha=** (0.132)	
Use of Valuation Equations	0.692
Current Economic Indicators	0.69
Time Before Funds are Needed	-0.601
Factor 6: Classic **alpha=** (0.463)	
Affordable Share Price	0.718
Minimizing Risk	0.558
Expected Dividends	0.476
Factor 7: Stock Broker Influence **alpha=** (0.502)	
Stock Broker Recommendation	0.81
Feelings For Firms Products And Services	0.451

Table 9: Seven Factors identified through Factor Analysis.

Factors	
Factor 1: Social relevance & Image	Local Operations
	International Operations
	Institutional Holdings
	Environmental Record
	Perceived Ethics Of Firm
Factor 2 : Accounting Information	Current Financial Position
	Condition of Financial Statements
	Exchange Listing
	Data In Reports & Prospectuses
Factor 3: Stock Performance	Past Performance of Investors Stock Portfolio
	Past Performance Of Stock
	Recent Price Movements Of Firms Stock
	Expected Stock Market Performance
	Gut Feeling On Economy
Factor 4: Friend/Coworker Influence	Friend or Coworker Recommendation
	Attractiveness of Non Stock Investments
factor 5: Evaluation	Use of Valuation Equations
	Current Economic Indicators
	Time Before Funds are Needed
Factor 6: Classic	Affordable Share Price
	Minimizing Risk
	Expected Dividends
Factor 7: Stock Broker Influence	Stock Broker Recommendation
	Feelings For Firms Products And Services

Table 9 summarizes the variables in each factor. First factor is "Social relevance & Image", which includes Local Operations, International Operations, Institutional Holdings, Environmental Record and Perceived Ethics of Firm. Although factor analysis does not allow a rank ordering of the important aggregate factors, it is notable that none of the variables that comprise this Social relevance & Image factor is ranked important by investors. Second factor was named "Accounting Information" in which

variables that loaded heavily include Current Financial Position, Condition of Financial Statements, Exchange Listing, and Data in Reports & Prospectuses. Third factor was "Stock Performance" which comprises of Past Performance of Investors Stock Portfolio, Past Performance of Stock, Recent Price Movements of Firms Stock, Expected Stock Market Performance, and Gut Feeling on Economy. All of these variables relate to the past and present performance of stocks and thus its cumulative impact on the stock market makes a sensible factor. All were important variables except Gut Feeling on Economy. Friend/Coworker Recommendation and Attractiveness of Non Stock Investments were a part of fourth factor, "Friend/Coworker Influence". The variables in the fourth factor were less influencing on investor's decision making. Use of Valuation Equations, Current Economic Indicators and Time before Funds are needed are a part of fifth factor named "Evaluation". Apparently most investors in the sample somewhat value these traditional stock valuation considerations. While sixth factor called "Classic" includes variables such as Affordable Share Price, Minimizing Risk and Expected Dividends. Each of these is a classic wealth maximization investment criterion and these variables received higher ratings by investors because of their dominance of the economic fundamentals of investor behavior. Final factor called "Stock Broker Influence" includes Stock Broker Recommendation and Feelings for Firms Products and Services. This factor ascertains that stock broker influences an investor in his purchase decisions and in making a perception about a company's products and services. Stock Broker Recommendation is somewhat important for investors in Karachi and they ignore their feelings for firms' products and services.

Conclusion

The findings suggest that classic wealth maximization and stock performance criteria are important to investors, even though investors employ diverse criteria when choosing stocks. Investors also make use of the accounting information derived by financial statements and the firm's financial position in general. Concerns such as the firm's ethical posture, local and international operations, and environmental record are not considered. The recommendations of family members, friends and coworkers go largely unheeded, recommendations of Stock Brokers are considered, but 86% of the sample investors are self reliant and make purchase decisions on their own without any ones influence. Individual investors do not use the valuation models when evaluating stocks but consider the current economic indicators like GDP, Inflation rates, etc. While they ignore exchange listings of firms, the data found in reports and prospectuses, feelings for firms products and services as well as discount the attractiveness of non stock investments.

There appears to be at least seven homogenous groups of variables which influence individual investor behavior. The investment decision process incorporates a broader range of items. Besides, each investor may view the seven broad criteria in a different way in terms of relative importance. This suggests that investment professionals would benefit by incorporating the variables discussed when addressing individual investor concerns.

Due to time constraint, it was unable to carry this research a step forward but this can further be taken up by other researchers to take the significant variables found in this study and tests their impact on the common stock holdings of individual investors.

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APPENDIX 1

Table 1: 30 variables used in the factor analysis

VARIABLES	
1) Expected Corporate Earnings	16. Expected Dividends
2) Diversification Needs	17. Competing Financial Needs
3) Feelings for Firm's Products and Services	18. Past Performance of Investor's Stock Portfolio
4) Condition of Financial Statements	19. Affordable Share Price
5) Past Performance of Stock	20. Data in Reports & Prospectuses
6) Attractiveness of Non-Stock Investments	21. Current Economic Indicators
7) Minimizing Risk	22. Use of Valuation Equations
8) Time before Funds are Needed	23. Stock Broker Recommendation
9) Tax Consequences	24. Institutional Holdings
10) Expected Stock Market Performance	25. Recent Price Movements of Firm's Stock
11) Gut Feeling on Economy	26. Family Member Opinions
12) Perceived Ethics of Firm	27. Exchange Listing
13) Friend or Coworker Recommendation	28. Local Operations
14) International Operations	29. Environmental Record
15) You/Yourself	30. Current financial position

Table 3: Frequency Distribution of Variables that Significantly Influence Investor Behavior

Frequency Distribution of Variables that Significantly Influence Investor Behavior		
Variables	**Frequency**	**Percentages (%)**
You/Yourself	131	85.6%
Expected Dividends	118	77.1%
Expected Stock Market Performance	103	67.3%
Expected Corporate Earnings	90	58.8%
Affordable Share Price	84	54.9%
Recent Price Movements of Firm's Stock	81	52.9%
Past Performance of Investor's Stock Portfolio	70	45.8%
Current financial position	69	45.1%
Diversification Needs	68	44.4%
Condition of Financial Statements	64	41.8%
Past Performance of Stock	64	41.8%
Stock Broker Recommendation	64	41.8%
Current Economic Indicators	62	40.5%
Time before Funds are Needed	57	37.3%
Minimizing Risk	54	35.3%
Tax Consequences	49	32%
Gut Feeling on Economy	45	29.4%
Use of Valuation Equations	41	26.8%
Competing Financial Needs	40	26.1%
Institutional Holdings	35	22.9%
Data in Reports & Prospectuses	31	20.3%
Exchange Listing	31	20.3%
Friend or Coworker Recommendation	29	19%
Feelings for Firm's Products and Services	27	17.6%
International Operations	23	15%
Attractiveness of Non-Stock Investments	21	13.7%
Local Operations	16	10.5%
Family Member Opinions	13	8.5%
Environmental Record	12	7.8%
Perceived Ethics of Firm	10	6.5%

Table 4: Frequency Distribution of Variables that Least Influence Investor Behavior

Frequency Distribution of Variables that Least Influence Investor Behavior		
Variables	**Frequency**	**Percentage (%)**
Environmental Record	96	62.7%
Family Member Opinions	91	59.5%
International Operations	80	52.3%
Perceived Ethics of Firm	79	51.6%
Attractiveness of Non-Stock Investments	77	50.3%
Friend or Coworker Recommendation	73	47.7%
Exchange Listing	71	46.4%
Local Operations	68	44.4%
Feelings for Firm's Products and Services	67	43.8%
Data in Reports & Prospectuses	44	28.8%
Gut Feeling on Economy	41	26.8%
Institutional Holdings	41	26.8%
Tax Consequences	40	26.1%
Past Performance of Stock	38	24.8%
Use of Valuation Equations	38	24.8%
Past Performance of Investor's Stock Portfolio	35	22.9%
Competing Financial Needs	31	20.3%
Minimizing Risk	26	17%
Time before Funds are Needed	24	15.7%
Current Economic Indicators	22	14.4%
Condition of Financial Statements	21	13.7%
Stock Broker Recommendation	21	13.7%
Diversification Needs	17	11.1%
Current financial position	14	9.2%
Affordable Share Price	11	7.2%
Recent Price Movements of Firm's Stock	11	7.2%
Expected Corporate Earnings	9	5.9%
Expected Stock Market Performance	6	3.9%
You/Yourself	4	2.6%
Expected Dividends	4	2.6%

Table 6: The Total Variance Explained by Seven Factors is 60%.

Total Variance Explained									
	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.242	22.293	22.293	6.242	22.293	22.293	3.591	12.826	12.826
2	2.852	10.185	32.478	2.852	10.185	32.478	2.98	10.642	23.468
3	2.146	7.664	40.143	2.146	7.664	40.143	2.909	10.389	33.857
4	1.922	6.864	47.007	1.922	6.864	47.007	2.11	7.537	41.394
5	1.375	4.911	51.918	1.375	4.911	51.918	2.098	7.494	48.888
6	1.298	4.636	56.554	1.298	4.636	56.554	1.71	6.109	54.997
7	1.062	3.794	60.348	1.062	3.794	60.348	1.498	5.351	60.348
8	1.051	3.754	64.102						
9	0.927	3.31	67.412						
10	0.87	3.108	70.52						
11	0.773	2.76	73.279						
12	0.722	2.578	75.857						
13	0.705	2.517	78.374						
14	0.671	2.395	80.769						
15	0.637	2.276	83.045						
16	0.546	1.952	84.997						
17	0.517	1.846	86.843						
18	0.464	1.658	88.501						
19	0.433	1.545	90.047						
20	0.431	1.539	91.585						
21	0.39	1.393	92.979						
22	0.361	1.29	94.268						
23	0.325	1.162	95.43						
24	0.32	1.142	96.573						
25	0.285	1.016	97.589						
26	0.25	0.892	98.481						
27	0.233	0.831	99.312						
28	0.193	0.688	100						