

Factors Affecting Stock Selection Decisions: Case of Retail Investors of Delhi-NCR

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Abstract

The study is an attempt to decipher the key factors considered by retail investors in Delhi-NCR region while selecting a stock and also attempted to inspect whether there are significant linkages between demographic characteristics of respondents and different principal factors considered important or pivotal by them. To fulfill the motive of the research paper, data was collected from 100 retail investors in Delhi-NCR and data analysis was executed with the help of factor analysis and One-way ANOVA. Findings of the study indicated that Accounting Information, Firm Image, Personal Needs, Neutral Information and Advocate Recommendation. Study also concluded that importance accorded to each important factor differed across respondents in terms of demographic features like age, education, income and experience.

Keywords: *Stock Selection, Delhi-NCR, ANOVA Test*

INTRODUCTION

Economic growth of any nation depends on the development of financial markets to a great extent and also aided by flow of investment in the market. But those investment in the market should be there for long term and for maintaining free flow of long term investments in the market there has to be a strong stock market. Stock market plays an important role in channeling of funds in to promising companies and also provides them a platform to raise money time to time. Equally important in the good performance of a stock market is decisions taken by the investors.

The conventional finance theory of finance popularly known as Modern Portfolio Theory and capital Asset Pricing Model, assume that investors are getting access to news of market in an uninterrupted manner and they are

behaving rationally. But in reality these assumptions did not break ground and on the contrary individual investors on many crucial occasions found to be behaving irrationally in the stock market. So it can be easily concluded that conventional theories irrational behavior of investors is still a riddle for market experts. In addition to this conventional theories do not give valid reasons behind movement of share prices.

Behavioral finance has emerged as an alternative to the conventional theories to understand the mechanism behind the difference in the response to the share price movements by the investors. Behavioral finance mainly concentrates on the interpretation of events by the investors be it macro and micro. Sometimes it has been found that investors do not participate in all the asset class, they show risk averse behavior, they

trade aggressively, too much reliance on historical data of a stock to predict the future movements in a stock price Kent et al. (2001).

With the onset of globalization new asset classes have emerged and decision making for investors turned more complex. All these new avenues of investment have different risk and return profile and investors choose products in accordance with their risk appetite. Though, investment decisions of retail investors can't be accurate all the time, it demands constant monitoring by them. As in stock market there are many companies and it becomes a very tedious process for the investors to pick good stocks, therefore it becomes important for us to decipher important factors which play a very important role in shaping stock selection decision of the investors. This study attempts to study these factors in relation to the demographic variables of the respondents. In this way study can be very useful for fund managers, brokerage houses and regulators to create new products for the investors.

LITERATURE REVIEW

Earlier studies in this field indicate that investment decisions of the investors in the stock market are mainly guided by influenced economic factors, firm related factors and last but not the least psychology. Phansaten (2012) carried out study in this regard and concluded that retail investors have poor track record in terms of performance when it is compared with performance of institutional investors, the mismatch between the two becomes even clearer due to the informational advantages enjoyed by the institutional investors. Chen et al (2014) concluded in his study that individual investors are good selectors of quality stocks. Eiving (1970) investors prefer stocks yielding regular dividends, growth and sound management of funds of the investors, are some

of the factors which figure in the scheme of planning of retail investors while selecting stocks. Bennet et al (2011) conducted a research on 400 respondents in Tamil Nadu in India and concluded that factors like quality of management, price to earnings ratio and return on investment are playing an instrumental role in helping investors to select stocks for investments. Baker and Haslem (1973) underlined the importance of accounting factors in the process of selection of stocks, many factors played their role in this like minority shareholders always prefer to be a part of that company which are financially sound, Abu Nasser and Rutherford (1996) also in their corroborative study underlined the importance of corporate reports for retail investors while selecting stocks for the investment. Joshi et al (2011) conducted research in the state of Gujrat in Kutch region to understand the basic motivating factors for investors which propel them to select a particular stock and he concluded that investors of the region give huge importance to financial performance of the company and least bothered by the publicity methods of the company to remain in the news. Nagy and Obenberger (1994) in their study selected 34 factors and through factor analysis concerns related to wealth maximization weigh heavily on the mind of retail investors while selecting stocks. Shanmugam (1990) identified the importance of objectives of an investor while making an investment playing a huge role in influencing stock selection of retail investors. Shiller (2000) in his study found the informational aspect related to the market the most important factor for retail investors while selecting stocks. Hodge (2003) identified some key factors in his study which are considered important by the retail investors while selecting stocks like auditor independence, earnings quality. Al Tamimi (2006) in his study found some important factors which influence the

stock selection decisions of investors of UAE which are namely: expected financial performance, stock marketability, past performance and government holdings. Maditinos et al. (2007) individual investors tend to focus more on the buzz about the stock while selecting the stocks that means noise trading is preferred by the retail investors but on the other hand professional investors tend to focus more on technical and fundamental analysis in addition to this key ratios like debt-equity, P/E ratio and EPS. Chong and Lai (2011) perused the Malaysian investor's stock selection behavior and the study concluded neutral information is rated very highly by the Malaysian investors, besides this Accounting Information is the other factor which is considered to be important by Malaysian investors.

OBJECTIVE OF THE STUDY

- i. The main objective of the study is to identify the factors which affects their stock selection decisions.
- ii. To find out any significant relation between demographic features of the investors and different aspects of information related to securities

METHODOLOGY OF THE STUDY

With the help of literature available in the public domain a structured questionnaire was prepared. The questionnaire was divided into two parts, first part carried questions related with demographic information related to investors and the second part was dealing with those variables which were considered important by investors while selecting securities.

Sample and Data Collection

The study involved a sample size of 100 respondents from Delhi-NCR area, as Delhi is the capital city of India, people living in this region are considerably more modern in approach in investment decision making. Data collection took place with the help of Google Form.

Data Analysis Procedure and Hypothesis

Data analysis was carried out with the help of SPSS statistical version 26. In the initial stages of the data analysis, descriptive analysis was done to assess the demographic profile of the respondents. To identify the key variables or factors which are considered to be important by retail investors while making stock selection, this was done by Factor Analysis, which is primarily done to reduce the number of relevant factors. At last, one way ANOVA was conducted to assess whether the mean score of the factors differ between investors with respect to age, gender, education, occupation, investment experience. Following hypothesis were formed to understand the stock selection behavior of investors:

H01: Stock Selection factors are not significantly different between male and female investors.

H02: Stock selection factors are not significantly different between investors of different age group.

H03: Stock selection factors are not significantly different between investors of different occupation group.

H04: Stock selection factors are not significantly different between investors of different income group.

H05: Stock selection factors are not significantly different between investors' educational qualifications

H06: Stock selection factors are not significantly different between different experience levels of investors.

RESULTS AND DISCUSSIONS

Demographic Profile of the Respondents

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	60	60.0	60.0	60.0
	Female	40	40.0	40.0	100.0
	Total	100	100.0	100.0	

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-30	89	89.0	89.0	89.0
	31-45	9	9.0	9.0	98.0
	46-60	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

Marital Status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	13	13.0	13.0	13.0
	Unmarried	87	87.0	87.0	100.0
	Total	100	100.0	100.0	

Education Qualification					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Up to Schooling	17	17.0	17.0	17.0
	Graduate	42	42.0	42.0	59.0
	Post Graduate	31	31.0	31.0	90.0
	Doctorate	4	4.0	4.0	94.0
	Professional (CA, CS, CMA)	6	6.0	6.0	100.0
	Total	100	100.0	100.0	

Occupation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Private Sector Employee	37	37.0	37.0	37.0
	Public Sector Employee	3	3.0	3.0	40.0
	Self-Employed	15	15.0	15.0	55.0
	Others	45	45.0	45.0	100.0
	Total	100	100.0	100.0	

Annual Income					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 3 lakhs	71	71.0	71.0	71.0
	3-6 lakhs	20	20.0	20.0	91.0
	>6-10 Lakhs	3	3.0	3.0	94.0
	>10 lakhs	5	5.0	5.0	99.0
	5	1	1.0	1.0	100.0
	Total		100	100.0	100.0

Reliability

Reliability Analysis is conducted to assess the internal consistency of the constructs in the study. A construct is considered to be reliable only when its Alpha value exceeds 0.70. Construct reliability is adjudged by using Cronbach Alpha. The results indicated that Accounting Information with six items ($\alpha = 0.931$), Advocate construct with five items ($\alpha = 0.844$), Neutral construct with five items ($\alpha = 0.922$), Firm Image construct with five items ($\alpha = 0.871$) and Personal Need construct with five items ($\alpha = 0.910$). Results of the reliability analysis are summarized here below:

Construct	No. of Items	Alpha (α)
Accounting Information	6	0.931
Advocate	5	0.844

Neutral	5	0.922
Firm Image	5	0.871
Personal Need	5	0.910

Factor Analysis

An Exploratory Factor Analysis was carried out to decipher key factors which attract the attention of retail investors while making stock selection, it was used with principal component analysis and varimax rotation. The minimum factor loading were set to be 0.50. The KMO measure of sampling adequacy which indicates the appropriateness of data for factor analysis is more than 0.80. Factor solution yielded by the factor analysis is five factor solution which accounts for the 72 percent variance in the data. All the factor loading are presented in below mentioned tables.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.880
Bartlett's Test of Sphericity	Approx. Chi-Square	1898.754
	df	325
	Sig.	.000

Rotated Component Matrix ^a					
	Component				
	1	2	3	4	5
AI6	.817				
AI3	.812				
AI2	.776				
AI1	.771				
AI5	.766				
AI4	.758				

Neutral5		.805			
Neutral2		.805			
Neutral3		.797			
Neutral4		.792			
Neutral1		.702			
PN5			.832		
PN4			.804		
PN3			.790		
PN1			.782		
PN2			.777		
FI2				.831	
FI3				.819	
FI4				.721	
FI1				.694	
FI5				.638	
Advocate2					.802
Advocate3					.789
Advocate4					.775
Advocate5					.744
Advocate1					.630
Extraction Method: Principal Component Analysis.					
Rotation Method: Varimax with Kaiser Normalization.					
a. Rotation converged in 6 iterations.					

One Way ANOVA Test between Different Age Group Respondents

One way ANOVA test is conducted to understand the level of importance being accorded by investors of different age groups to different aspects of the stock selection like accounting information, advocate

recommendation, personal needs, firm image and personal needs. Findings of the study in relation to the ANOVA test with respect to the age of the investors, indicate that null hypothesis is accepted as stock selection factors are not significantly different between investors of different age group

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AI	Between Groups	.911	2	.456	.524	.594
	Within Groups	84.319	97	.869		
	Total	85.230	99			
Advocate	Between Groups	.409	2	.205	.275	.760
	Within Groups	72.171	97	.744		
	Total	72.580	99			
Neutral	Between Groups	.364	2	.182	.229	.796
	Within Groups	76.924	97	.793		
	Total	77.288	99			
FI	Between Groups	.251	2	.125	.166	.847
	Within Groups	73.050	97	.753		
	Total	73.300	99			
PN	Between Groups	1.240	2	.620	.794	.455

	Within Groups	75.750	97	.781		
	Total	76.990	99			

One Way ANOVA Test with respect to Investors of Different Occupation Group

Finding of this test with respect to different occupation group leads to the rejection of null

hypothesis and stock selection decisions of investors differ significantly as per their occupations as it is quite clear from the p-value of all the factors considered by investors before purchasing any stock.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AI	Between Groups	11.934	3	3.978	5.210	.002
	Within Groups	73.296	96	.764		
	Total	85.230	99			
Advocate	Between Groups	10.912	3	3.637	5.662	.001
	Within Groups	61.668	96	.642		
	Total	72.580	99			
Neutral	Between Groups	12.897	3	4.299	6.409	.001
	Within Groups	64.391	96	.671		
	Total	77.288	99			
FI	Between Groups	7.789	3	2.596	3.805	.013
	Within Groups	65.512	96	.682		
	Total	73.300	99			
PN	Between Groups	10.425	3	3.475	5.011	.003
	Within Groups	66.566	96	.693		
	Total	76.990	99			

One way ANOVA Test with respect to Investors having Different Income

Findings of One way ANOVA test with respect to decisions making of investors belonging to different income group, leads to the partial

rejection of null rejection as the result suggested that accounting information and personal needs are the few factors where decisions of the investors of different income group differ a lot.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AI	Between Groups	9.243	4	2.311	2.889	.026
	Within Groups	75.987	95	.800		
	Total	85.230	99			
Advocate	Between Groups	6.668	4	1.667	2.403	.055
	Within Groups	65.913	95	.694		
	Total	72.580	99			
Neutral	Between Groups	5.895	4	1.474	1.961	.107
	Within Groups	71.393	95	.752		
	Total	77.288	99			
FI	Between Groups	2.466	4	.616	.827	.511
	Within Groups	70.835	95	.746		
	Total	73.300	99			

PN	Between Groups	8.647	4	2.162	3.005	.022
	Within Groups	68.343	95	.719		
	Total	76.990	99			

One way ANOVA test with respect to Investors having Different Educational Qualifications

Findings of this test with respect to the investors possessing different educational qualifications, indicate that accounting

information and personal needs are the two factors which are being significantly accorded different importance by investors having different educational qualification, leading to partial rejection of null hypothesis.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AI	Between Groups	8.239	4	2.060	2.542	.045
	Within Groups	76.991	95	.810		
	Total	85.230	99			
Advocate	Between Groups	3.376	4	.844	1.159	.334
	Within Groups	69.204	95	.728		
	Total	72.580	99			
Neutral	Between Groups	5.079	4	1.270	1.670	.163
	Within Groups	72.209	95	.760		
	Total	77.288	99			
FI	Between Groups	5.397	4	1.349	1.888	.119
	Within Groups	67.904	95	.715		
	Total	73.300	99			
PN	Between Groups	8.576	4	2.144	2.977	.023
	Within Groups	68.414	95	.720		
	Total	76.990	99			

One way ANOVA test with respect to Different Experience Level of Investors

Findings of One way ANOVA test with respect to different level of experience of investors

indicated that firm image and personal needs are the two factors which differ a lot among investors of different experience level, leading to partial rejection of the null hypothesis in this regard.

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
AI	Between Groups	6.301	4	1.575	1.896	.117
	Within Groups	78.929	95	.831		
	Total	85.230	99			
Advocate	Between Groups	5.925	4	1.481	2.111	.085
	Within Groups	66.656	95	.702		
	Total	72.580	99			
Neutral	Between Groups	1.382	4	.345	.432	.785
	Within Groups	75.906	95	.799		
	Total	77.288	99			
FI	Between Groups	9.773	4	2.443	3.654	.008
	Within Groups	63.528	95	.669		

	Total	73.300	99			
PN	Between Groups	7.914	4	1.978	2.721	.034
	Within Groups	69.076	95	.727		
	Total	76.990	99			

CONCLUSION

The present study focused on the major factors considered by the retail investors while making stock selection decisions. These major factors namely Accounting Information, Firm Image, Personal Needs, Neutral Information and Advocate Recommendation with the help of Factor Analysis. Findings of the study indicated that Accounting Information is significantly differently treated by investors of different education, income, occupation. Firm Image as a factor has significant difference in importance level among investors of different experience, occupation. Respondents belonging to different income group are giving importance to personal needs and accounting information. People with different degree of trading experience are giving more weightage to Firm Image factor while selecting stocks.

At last, this research is going to be useful for future references as existing literature in relation to factors shaping stock selection decision of investors is very limited, cities like Delhi-NCR have not got proper share of attention, secondly this research will facilitate comparison with other similar studies in the past and may result in addition of new relevant variables while understanding the decision making process of retail investors.

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