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REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

ACKNOWLEDGMENTS

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APPENDIX/ANNEXURE

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- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

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- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

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- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

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INVESTOR BEHAVIOR TOWARDS MUTUAL FUND SCHEMES: AN EMPIRICAL STUDY

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ABSTRACT

Mutual Fund industry plays a pivotal role in the optimal allocation and channelization of available idle resources in the economy. This role becomes much stronger in the developing economies like India where the prospective investors do not have much investment knowledge, information, and facilities to invest in the capital markets neither they have risk aptitude for direct investments in risky stocks. The present study is pioneer in its nature to investigate the preferences of investors towards mutual fund schemes. The primary data were collected across the states of Jammu & Kashmir and Punjab. Various statistical tools were applied to the data so collected. The findings of the study revealed that investment returns, perception of investors, information sources, investors valuation, investors objectives and investments decisions have significance impact on retail investors preferences.

KEYWORDS

Investment, information sources, investor preference, mutual fund.

INTRODUCTION

Mutual funds play an important role for channelizing and optimal allocation of idle resources and savings available in the economy of the individual and institutional investors. The mutual funds are asset management companies which invest in stocks, bonds and other types of money market or combination of these securities. The primary goal of mutual fund is pool small savings, use the idle resources in corporations and invest in a well diversified portfolio of securities, which would allow the investor to significantly reduce, or even eliminate the asset specific (non market) risk of securities. The person saving a part of his/her income tries to find a temporary repository for his savings until they are required to finance his future expenditure. This results in investments. Therefore, investment may be defined as "a commitment of funds made in the expectations of some positive returns". Expectation of return is an essential element of investment.

Increased number of mutual funds all over the world, mainly in developed countries, is an indication of investors' preference for this indirect mode of low-risky investment (Huhmann, 2005). During the past few decades, the mutual fund industry has experienced a tremendous growth, whereas, mutual fund is still a recent phenomenon in emerging markets. This tremendous growth has lead to the creation of various types of mutual funds. These types can be categorized in two broad segments: open-ended and close-ended. The open-ended funds are the funds whose redemption and subscription of shares, which are also called units, is allowed on continual basis. These funds are also characterized as having no customers but the shareholders only. The close-ended funds, on the other hand, all called up and subscribed only once at the commencement of the fund and then traded in the secondary capital markets between the general public. In general, the mutual funds are established and incorporated to benefit small investors who cannot invest directly in money market or capital market securities due to any reason.

CHOOSING THE RIGHT INVESTMENT OPTIONS

The investors would like to know how to go about the task of investment, how much to invest at any moment and when to buy or sell the securities, This depends on investment process as investment policy, investment analysis, valuation of securities, portfolio construction and portfolio evaluation and revision. Every investor tries to derive maximum economic advantage from his/her investment activity. For evaluating an investment, avenues are based upon the rate of return, risk and uncertainty, capital appreciation, marketability, tax advantage and convenience of investment. The choice of the best investment options will depend on personal circumstances as well as general market conditions. In most cases, the right investment is a balance of three things i.e. Liquidity, Safety and Return.

The 'expectations' of the investors are influenced by their "perception" and investors generally relate perception to action. The beliefs and actions of many investors are influenced by the dissonance effect and endowment effect. The tendency to adjust beliefs to justify past actions is a psychological phenomenon termed by Festinger (1957) as Cognitive Dissonance. Researcher studied the attitudinal preferences and information sources consulted by investors while making investment decisions in mutual funds. Apart from the many advantages that investing in mutual funds provide like diversification, professional management, the ease of investment process has proved to be a major enabling factor. However, with the introduction of innovative products, the world of mutual funds nowadays has a lot to offer to its investors. With the introduction of diverse options, investors need to choose a mutual fund that meets their risk acceptance and risk capacity levels and has similar investment objectives as those of the investor.

With the plethora of schemes available in the Indian markets, an investors needs to evaluate and consider various factors before making an investment decision. Since India has started integration with the world markets and the economy being no more a closed one, external factors which are complex in nature affect the investors in their decision making. Mutual funds provide an option of investing without getting loss in the complexities. Most importantly, mutual funds provide risk diversifications among the primary tenets of portfolio management. Majority of the investors are not necessarily well qualified to apply the theories of portfolio structuring to their holdings and hence would be better off leaving the job to a professional. The basic needs which an investor tries to fulfill include security of original capital; wealth accumulation; comfort factor; tax efficiency; life cover; income; simplicity; ease of withdrawal.

REVIEW OF LITERATURE

In the present corporate scenario, behavioural finance has emerged as an imperative area of study which demands scholarly investigation. It deals with the influence of psychology on the behaviour of financial practitioners and the subsequent effect on markets. Behavioural finance is of immense interest as it helps to explain why and how markets might be inefficient. Although there are enough research evidences which support investment portfolio, the concept of behavioural finance still seems to be in embryonic stage. There are very few studies available about investor's perception, preferences, attitudes and behaviour.

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Research reveals that fund/scheme selection by investors is based on past performance of the funds and money flows into winning funds more rapidly than they flow out of losing funds (**Ippolito,** 1992).A study conducted by Goetzman (1997) concluded that psychology of investors has an impact on fund/scheme selection and switching. While investigating the possible psychological basis for investor behaviour, **De Bondt & Thaler (1985)** argue that mean reversion in stock prices is an evidence of investor over reaction where investors over emphasize recent firm performance in forming future expectations.

SEBI – NCAER Survey (2000) was carried out to estimate the number of households and the population of individual investors, their economic and demographic profile, portfolio size, and investment preference for equity as well as other savings instruments. Some of the relevant findings of the study were: Households preference for instruments match their risk perception; Bank Deposit has an appeal across all income class; 43% of the non-investor households equivalent to around 60 million households apparently lack awareness about stock markets; and, compared with low income groups, the higher income groups have higher share of investments in Mutual Funds (MFs) signifying that MFs have still not become truly the investment vehicle for small investors.

Shanmugham (2000) conducted a survey of 201 individual investors to study the information sourcing by investors, their perceptions of various investment strategy dimensions and the factors motivating share investment decisions, and reports that among the various factors, psychological and sociological factors dominated the economic factors in share investment decisions. Another study conducted by **Madhusudhan V. Jambodekar** (1996) assessed the awareness of MFs among investors, to identify the information sources influencing the buying decisions and the factors influencing the choice of a particular fund. The study revealed that the income schemes and open ended schemes are more preferred than growth schemes and close ended schemes during the then prevalent market conditions. Investors look for safety of principal, liquidity and capital appreciation in the order of importance. Further, newspapers and magazines are the first source of information through which investors get to know about MFs/Schemes and investor service is a major differentiating factor in the selection of Mutual Fund Schemes. **Sujit Sikidar & Amrit Pal Singh** (1996) carried out a survey with an objective to understand the behavioural aspects of the investors of the North Eastern region towards equity and mutual funds investment portfolio. The survey revealed that the salaried and self employed persons formed the major investors in mutual funds primarily due to tax concessions.

Syama Sunder (1998) conducted a survey to get an insight into the mutual fund operations of private institutions with special reference to Kothari Pioneer. The survey revealed that awareness about Mutual Fund concept was poor during that time in small cities like Visakhapatnam. Agents play a vital role in spreading the Mutual Fund culture. Open-end schemes were much preferred. Brand image and return proved to be the prime considerations while investing in any Mutual Fund.

Anjan Chakarabarti & Harsh Rungta (2000) stressed the importance of brand effect in determining the competitive position of the AMCS. The study revealed that brand image factor, though cannot be easily captured by computable performance measures, influences the investor's perception and hence his/her fund/scheme selection.

Since 1986, a number of articles and brief essays have been published in financial dailies, periodicals, professional and research journals, explaining the basic concept of Mutual Funds and highlight their importance in the Indian capital market environment. They touch upon varied aspects like Regulation of Mutual Funds, Investor expectations, Investor protection, Trend in growth of Mutual Funds etc. A few among them are **Vidyashankar** (1990), **Sarkar** (1991), **Agarwal**(1992), **Sadhak** (1991), **Sharma C. Lall** (1991), **Samir K. Barua** *et al.,* (1991), **Sandeep Bamzai** (2001), **Atmaramani** (1995), **Atmaramani** (1996), **Subramanyam**(1999), **Krishnan** (1999), **Ajay Srinivsasn** (1999). Segmentation of investors on the basis of their characteristics was highlighted by **Raja Rajan** (1997). Investor's characteristics on the basis of their investment size **Raja Rajan (**1997), and the relationship between stage in life cycle of the investors and their investment pattern was studied **Raja Rajan (**1998).

HYPOTHESES
H1: Type of mutual fund scheme has a significant impact on retail investors' preferences.
H0: Type of mutual fund schemes does not have a significant impact on retail investors' preferences.

METHODOLOGY
The study is empirical in nature. The scope of the study extends to four cities of Northern India namely Jammu, Srinagar, Chandigarh and Ludhiana. The data was collected both from primary as well as secondary sources. The primary data was collected by using a structured questionnaire. The questionnaire was framed on the basis of investment decisions and preferences of investors. An analysis was done and changes were made to overcome the errors. Factor analysis was done which reduced the number of variables to 31. This was followed by primary data collection. The secondary data was collected from various sources like journals, magazines, periodicals, books, published and unpublished research materials, online search engines etc. A sample size of 1000 was taken out of which 841 filled questionnaire were received. Various statistical tools like statistical tools implemented are factor analysis, mean, standard deviation, multiple nominal logistic regression were applied.

FACTOR ANALYSIS
Data related to measurement of preferences of retail inventors' towards mutual fund schemes was subjected to factor analysis for dimension reduction to find relevant factors. Bartlett's Test of Sphericity (Table 1) indicated a high Chi-square value of 5960.098 with 378 degrees of freedom at significance level of .000. Only those factors were retained which showed large Eigen values as given in the table 2.

DESCRIPTIVE STATASITICS FOR VAROUS MEASUREMENT ITEMS
The following section deals with the mean and the respective standard deviations of the various measurement items. The section is divided into five factors of attitudinal and information preferences of retail investors towards mutual fund schemes while making investment decisions.

The items related to "Investment Returns" in table 3.1 below the total means value 3.2024 at 7 point scale and it suggest that the investors believe that the investment returns are less emphasized by the mutual fund investor. The mean values of items are varying from 2.832 to 4.172 which emphasis low care of investors towards the investment returns.

The item R5 in the table 3.1 has mean value 4.172 at 7 point scale and inclining towards the high value than other items, explaining that the mutual fund firms highly focused on the high return of the investor while making portfolio for their customers. Further indicates that the investors give less importance to the other investment returns variables.

In table (3.2) similarly the overall mean value of 5.2502 for "perception" of investor's factor further indicates its relevance in defining the perception of retail investors towards mutual fund schemes. The mean values for various dimensions of reliability ranges from 4.669 to 5.795 showing the importance of reliability of perception of investors towards mutual fund schemes. Moreover investors give more importance toward diversification of portfolio in mutual fund (P6) with a mean value of 5.795.

Table (3.3) gives the mean values of the items of "Information Sources". The mean value of the factors varies from 4.343 to 5.371 and the overall mean value for all the variables comes to 5.1865 suggesting that the most of the investors consulted information sources while making investment decisions in mutual funds schemes. The variable (I, 1) i.e., discussion with professional advisor have maximum mean value 5.271 shows the preferences of investors while making investments. The values given in table (3.4) below related to "Valuation of Investors" reflect the attitude of investors in investments. The mean values vary from 4.882 to 5.897 and the overall mean value is 5.4678 shows that investors attitudinal preferences towards this factor. All factors in this are almost equally important for all the investors except the factor (V3) which consider inflation resistance. The last factor in table (3.5) shows the "Investors Objectives" while making investment in mutual fund schemes. The overall mean value is 5.2093 and the values of mean ranges from 5.003 to 5.587. This factor also affects the attitude of investors while making investment decisions.

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MULTINOMIAL LOGISTIC REGRESSION

OVERALL TEST OF RELATIONSHIP

Initial Log Likelihood Function, (-2 Log Likelihood or -2LL) is a statistical measure. If our independent variables have a relationship to the dependent variable, we will improve our ability to predict the dependent variable accurately, and the log likelihood measure will decrease. The initial log likelihood value (2016.660) is a measure of a model with no independent variables, i.e. only a constant or intercept. The final log likelihood value (971.331) is the measure computed after all of the independent variables have been entered into the logistic regression. The difference between these two measures is the model chi-square value (1045.328= 2016.660- 971.331) that is tested for statistical significance.

The overall test of relationship is shown in Table 4.1. The table shows the relationship between the preferences and investment decision of retail investors while making investment in mutual fund schemes. The presence of a relationship between the dependent and combination of independent variables is based on the statistical significance of the final model chi-square in the below table i.e., (termed model fitting information). In this analysis, the distribution reveals that the probability of the model chi-square (1045.328) was 0.000, less than the level of significance of 0.05 (i.e. $p<0.05$). This explained that preferences of investors have a significant impact on investment decision of retail investors. After finding the significant relationship between the dependent and independents variable the researcher used the case processing summary for dependent variable to know the by chance accuracy rate. This rate is useful for validating the model for research in multinomial logistic regression.

STRENGTH OF MULTINOMIAL LOGISTIC REGRESSION RELATIONSHIP

In table 4.2, Researcher compute correlation measures to estimate the strength of the relationship (pseudo R square measures, such as Nagelkerke's R^2), these correlation measures do not really tells an analyst much about the accuracy. A more useful measure to assess the utility of a multinomial logistic regression model was the classification accuracy, which compares predicted group membership based on the logistic model to the actual, known group membership, which is the value for the dependent variable. To assess the strength of multinomial logistic regression relationship, however, the evaluation of the usefulness for logistic models was considered. In this case, using Cox & Snell R Square, the Nagelkerke R square value and McFadden R square vale, they provide an indication of the amount of variation in the dependent variable. These are described as pseudo R square. The distribution in the below table reveals that the values are 0.711, 0.776 and 0.500 respectively, suggesting that between 71.1 percent, 77.6 percent and 5.00 percent of the variability is explained by this set of variables used in the model.

EVALUATING USEFULNESS FOR LOGISTIC MODELS

The value of by chance accuracy in table 4.3 and 4.4 was computed by calculating the proportion of cases for each group based on the number of cases in 'Case Processing Summary', and then squaring and summing the proportion of cases in each group $(0.453^2 + 0.132^2 + 0.293^2 + 0.122^2 = 0.322)$ which is shown in Table 4.3. To characterize the model as useful, the study compared the overall percentage accuracy rate produced as 25% more than the proportional by chance accuracy. The proportional by chance accuracy criteria is 40.25% (1.25 x 32.2% = 40.25%). The classification accuracy rate was 44.2% (table classification) shown in 4.3, which was greater than the proportional by chance accuracy criteria of 40.25%, suggesting that the model was useful in the study.

RELATIONSHIP OF INDEPENDENT AND DEPENDENT VARIABLES

The likelihood ratio test evaluates the overall relationship between an independent variable and dependent variables. In table 4.5 there is a statistically significant relationship between the independent variables (preferences of investors) and the dependent variables (investment decisions).The relationship between Factor one (Investment Returns) and investments decisions has the probability of the chi-square statistic (267.852) is 0.000, equal to the value of significance level at 0.005 shows that returns on investment have significance impact on retail investors preferences I.e. investments preferences of investors were changed according to the returns on investments. For the relationship between Factor two (Perception of Investors), Factor three (Information Sources), Factor four (Investors Valuation) and Factor five (Investors Objectives) having chi-square value 337.208, 273.982, 162.380, 245.502 respectively and also have significant relationship for investment decisions of investors.

DISCUSSION AND CONCLUSION

The global interest and demand for mutual funds have increased dramatically during recent years. Mutual funds are today a very important savings vehicle for most people in developed countries and they provide an excellent opportunity to obtain a more diversified portfolio through investments in new markets and asset classes. In the light of the fast growth and the increasing importance of the mutual fund industry in the society, understanding of investor behavior is critical to policymakers and asset managers to successfully meet the many challenges and opportunities. Policymakers need to have an understanding of investor behavior in order to design the new define contribution systems appropriately. Similarly, an understanding of investor behavior is an important task for asset managers in order to be successful in the battle of fund flows. In this backdrop, the present paper has added an insight to the existing literature on individuals' behavior in the financial markets by examining preferences of retail investors and investment decisions in mutual funds. The descriptive static section deals with the mean and the respective standard deviations of the various measurement items. The section is divided into five factors of attitudinal and information preferences of retail investors towards mutual fund schemes while making investment decisions. The items related to factor one I.e. investments returns suggest that the investors believe that the investments returns are less emphasized by the mutual fund investors and the factor two, three, four and five shows that the investors give much more importance to these for making investment decisions. Research analysis revealed there is a statistically significant relationship between the independent variables (preferences of investors) and the dependent variables (investment decisions).The relationship between Factor one (Investment Returns), Factor two (Perception of Investors), Factor three (Information Sources), Factor four (Investors Valuation) and Factor five (Investors Objectives) and investments decisions shows that investment have significance impact on retail investors preferences .

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TABLE 1: KMO AND BARTLETT's TEST

Kaiser-Meyer- Olkin Measure of Sampling Adequacy.		.770
Bartlett's Test of Sphericity	Approx. Chi-Square	5960.098
	Df	378
	Sig.	.000

TABLE 2: TOTAL VARIANCE EXPLAINED

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.389	15.674	15.674	4.389	15.674	15.674
2	3.411	12.182	27.856	3.411	12.182	27.856
3	1.777	6.345	34.201	1.777	6.345	34.201
4	1.459	5.210	39.411	1.459	5.210	39.411
5	1.365	4.874	44.285	1.365	4.874	44.285
6	1.292	4.615	48.900	1.292	4.615	48.900
7	1.176	4.199	53.099	1.176	4.199	53.099
8	1.155	4.124	57.223	1.155	4.124	57.223
9	1.055	3.768	60.991	1.055	3.768	60.991
10	1.015	3.625	64.616	1.015	3.625	64.616
11	.864	3.086	67.701			
12	.854	3.050	70.751			
13	.791	2.826	73.577			
14	.722	2.578	76.155			
15	.666	2.380	78.535			
16	.649	2.317	80.852			
17	.620	2.214	83.066			
18	.575	2.052	85.118			
19	.543	1.941	87.059			
20	.527	1.881	88.941			
21	.482	1.721	90.662			
22	.455	1.624	92.286			
23	.441	1.574	93.860			
24	.433	1.547	95.407			
25	.390	1.394	96.801			
26	.369	1.318	98.119			
27	.297	1.060	99.179			
28	.230	.821	100.000			

Extraction Method: Principal Component Analysis.

TABLE 3.1

FACTOR ONE(Investment Returns)		MEAN	STD. DEV.
R1	Return of the principal amount invested in mutual fund is assured.	2.877	1.756
R 2	Mutual fund returns are fully protected and guaranteed by SEBI.	3.168	1.769
R 3	Mutual fund investing gives a definite positive return.	2.963	1.710
R 4	Ups and downs of stock market will not affect the return from mutual fund.	2.832	1.736
R 5	Mutual funds gives positive, regular & greater return than term deposits	4.172	1.680
	Overall mean	3.2024	0.4983

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TABLE 3.2

FACTOR Two(Perception)		MEAN	STD. DEV.
P 1	There are many mutual fund schemes to meet the varied needs of investors.	5.342	1.415
P 2	Mutual fund is a good investment option in financial instruments.	5.573	1.332
P 3	Mutual funds are less risky as compared to other investments.	4.669	1.598
P 4	Investment in mutual fund realizes the benefits of stock market investing.	4.688	1.512
P 5	It is imperative for me to monitor the **print** and **electronic** media for making informed investment decisions.	5.109	1.197
P 6	Diversification of portfolio make me to invest in mutual fund schemes	5.795	1.206
P 7	I prefer capital growth while making investment decisions.	5.571	1.270
P 8	Due to professional investment, a good return can be expected of mutual fund.	5.255	1.277
	Overall mean	5.2502	0.3850

TABLE 3.3

FACTOR Three (Information Sources)		MEAN	STD. DEV.
I 1	I prefer to discuss with **professional** financial advisor before making any investment in mutual fund.	5.271	1.356
I 2	**Prospectuses** of mutual fund companies plays important role for making investment decisions.	5.206	1.206
I 3	Views of my **friends** and **family** play a major role in investment decisions.	4.343	1.451
I 4	**Financial statements** give overview of the mutual fund companies.	5.544	1.147
I 5	I always review mutual fund shareholders reports.	5.564	1.139
I 6	Entry and Exit out of mutual fund is easy.	5.191	1.281
	Overall mean	5.1865	0.4060

TABLE 3.4

FACTOR Four(Valuation of Investors)		MEAN	STD. DEV.
V 1	I prefer brand name of the firm while making investment decision.	5.545	1.367
V 2	**Funds rating** from a rating service of a mutual fund company must be considered	5.595	1.125
V 3	I prefer inflation resistance while making investment decision.	4.882	1.308
V 4	**Portfolio** held by mutual fund is important for making investment decisions.	5.741	1.095
V 5	I always review research analyst report from brokers.	5.897	1.170
V 6	I prefer tax benefit while making investment decision.	5.147	1.420
	Overall mean	5.4678	0.3481

TABLE 3.5

FACTOR Five (Investors Objectives)		MEAN	STD. DEV.
O 1	I prefer safety of principal amount while making investment in mutual fund.	5.587	1.352
O 2	I prefer liquidity of money while making investment decision.	5.038	1.304
O 3	I prefer stability of income while making investment decision.	5.003	1.422
	Overall mean	5.2093	0.2674

TABLE 4.1: MODEL FITTING INFORMATION

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	2016.660			
Final	971.331	1045.328	384	.000

TABLE 4.2: PSEUDO R-SQUARE

Cox and Snell	.711
Nagelkerke	.776
McFadden	.500

TABLE 4.3: CASE PROCESSING SUMMARY

Schemes		N	Marginal Percentage
	Growth Schemes	381	45.3%
	Balanced Schemes	111	13.2%
	Tax Saving Schemes	246	29.3%
	Income Schemes	103	12.2%
Valid		841	100.0%
Missing		0	
Total		841	
Subpopulation		518[a]	

a. The dependent variable has only one value observed in 497 (95.9%) subpopulations.

TABLE 4.4: CLASSIFICATION

Observed	Predicted				
	Growth Schemes	Balanced Schemes	Tax Saving Schemes	Income Schemes	Percent Correct
Growth Schemes	353	0	25	3	92.7%
Balanced Schemes	101	0	6	4	.0%
Tax Saving Schemes	232	0	14	0	5.7%
Income Schemes	98	0	0	5	4.9%
Overall Percentage	93.2%	.0%	5.4%	1.4%	44.2%

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TABLE 4.5: LIKELIHOOD RATIO TESTS

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	971.331[a]	.000	0	.
Factor _ 1 (Investment Returns)	1239.183[b]	267.852	90	.000
Factor _ 2 (Perception of Investors)	1308.539[b]	337.208	99	.000
Factor _ 3 (Information Sources)	1245.313[b]	273.982	75	.000
Factor _ 4 (Investors Valuation)	1133.712[b]	162.380	75	.000
Factor _ 5 (Objectives of Investors)	1216.833[b]	245.502	45	.000

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.

b. Unexpected singularities in the Hessian matrix are encountered. This indicates that either some predictor variables should be excluded or some categories should be merged.

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