Research Article

A Study on Factor Influencing Mutual Fund Investment - Special Reference to Investor in Pharmaceutical Sector at Chennai Metro City

*T. Velmurugan, **N. Vijai Anand
*Research Scholar, Research & Development Centre, Bharathiar University, Coimbatore, Tamilnadu, India.
**Head of the Dept, Dept of Management Studies, Dhanalakshmi Srinivasan, Engineering College, Perambalur, Tamilnadu, India.
*Corresponding author's E-mail: velmuruganmba79@gmail.com

ABSTRACT

Mutual funds companies are collecting money from savers and invest them in equities, bonds, government securities, money market instruments etc. The fund manager wants to give good returns to the investors so that, they construct a diversifiable portfolio of investment. Mutual fund investors perspective investment in mutual funds it consider various factors like, fund size, types of schemes, scheme portfolio, expected return and risk etc. This study mainly examines the various factors influencing mutual fund investment decision making. Using of rotated factor matrix analysis of several variables has been influenced investment decision. The most influencing factors are fund size and past performance of the funds. Similarly some other factors are also influence investment decision of the investor they are type of fund, scheme portfolio, reputation of fund manager, dividend history of the funds and prompt settlement.

Keywords: Mutual Funds, Investor, Scheme Portfolio, Investment Decision, Brand Name, Rate of Return.

INTRODUCTION

Maximization of wealth is the main objectives of all investors. There are lot of investment avenues are available for the investors to achieve their objectives. They are bank deposit, post office savings, government securities or bonds, real estate, gold or e-gold, mutual fund, commodities, insurance, shares, public provident funds, pension funds, chit funds etc. These are the avenues are having, different characteristics, different features, some avenues competing themselves for the alternatives for the investor. Mutual fund is one of the important options for the investor; invest in their money to get high return and less risk. The mutual funds mobilize resources from savers and investing various equity linked and non equity linked investment option based on investor needs. Choosing a particular scheme or not, in mutual fund there is no proper model or guidance. Taking of mutual fund investment decision consider several factors. This study is an attempt to examine various factors influencing mutual fund investment decisions making in Chennai metro city.

Objectives of the Study

- To identify the factors influencing mutual fund investment decision

- To prioritize the various factors and analyze the major factors which influence investment decision in mutual fund.

Review of Literature

1. Sundar and Prakash (2014) in their study examined the awareness among the investor community in choosing the best mutual fund scheme as it conducted a comparative analysis of the mutual funds of three AMCs. This study also showed that much information about mutual funds is not available publicly. There is no information on fund styles or comprehensive league tables to allow the comparison of mutual funds in the market.[1]

2. Rao and Daita (2013) in their study attempted to analyze the influence of fundamental factors such as economy, industry, and company on the performance of mutual funds. Efforts was made to carry out an in-depth analysis of the economy through a collection of monthly data pertaining to key macro-economic variables covering a period of 228 months spread over 19 years. The casual relationship between real economic variables and their impact on statistics, correlation matrix, and Granger's causality test. To appraise the mutual fund industry various aspects such as assets under management, investor type, and product classification were studied with the help of percentage analysis.[2]

3. V. Rathnamani (2013) concluded that many investors are chosen to invest in mutual fund in order to have high gain at low level of risk, safety liquidity. It can be said that the Mutual Fund as an investment vehicle is capturing the attention of various segments of the society, like academicians, industrialists, financial intermediaries, investors and regulators for varied reasons and deserves an in depth study.[3]

4. Kalpesh P Prajapati and Mahesh K Patel (2012) evaluated the performance of Indian mutual funds using relative performance index, risk-return analysis, Treynor's ratio, Sharp's ratio, Sharp's measure, Jensen's measure, and Fama's measure. The data

used is daily closing NAVs from 1st January 2007 to 31st December, 2011 and concluded that most of the mutual funds have given positive return during the period of study.[4]

5. Dhume and Ramesh (2011) conducted a study to analyze the performance of the sector funds. The sectors considered were Banking, FMCG, Infrastructure, Pharmacy and Technology. The study used different approaches of performance measures. Findings of study revealed that all the sector funds have outperformed the market except infrastructure funds.[5]

6. Deepak Agarwal (2011), Mutual fund contributes to globalization of financial markets and is one among the main sources for capital formation in emerging economies. He analyzed the pricing mechanism of Indian Mutual Fund Industry, data at both the fund-manager and fund-investor levels. There has been incredible growth in the mutual fund industry in India, attracting large investments from domestic and foreign investors. Tremendous increase in number of AMCs providing ample of opportunity to the investors in the form of safety, hedging, arbitrage, limited risk with better returns than any other long-term securities has resulted in attracting more investors towards mutual fund investments.[6]

7. R. Anitha (2011), in their study evaluated the performance of public-sector and private sector mutual funds for the period from 2005 to 2007. Selected funds were analyzed using Statistical tools like Mean, Standard Deviation and Co-efficient of Variation. The performance of all funds has shown volatility during the period of study making it difficult to earmark one particular fund which could outperform the other consistently.[7]

8. Singh and Jha (2009) conducted a study on awareness & acceptability of mutual funds and found that consumers basically prefer mutual fund due to return potential, liquidity and safety and they were not totally aware about the systematic investment plan. The invertors' will also consider various factors before investing in mutual fund.[8]

9. Walia Nidhi & Kiran Ravi (2009) in their study have tried to identify critical gaps in the existing framework for mutual funds and further extend it to understand the need of redesigning existing mutual fund services by acknowledging Investor Oriented Service Quality Arrangements (IOSQA) in order to comprehend investor's behavior while introducing any financial innovations.[9]

10. Sathya Swaroop Debasish (2009) studied the performance of 23 schemes offered by six private sector mutual funds and three public sector of mutual funds based on risk-return relationship models and measures it over the time period of 13 years (April 1996 to March 2009). The analysis has

been made on the basis of mean return, beta risk, co-efficient of determination, Sharpe ratio, Treynor ratio and Jensen Alpha. The overall analysis concludes Franklin Templeton and UTI being the best performers and Birla SunLife, HDFC and LIC mutual funds showing below-average performance when measured against the risk-return relationship models.[10]

11. Das Bhagaban, Mohanty Sangeeta, Shil Chandra Nikhil (2008) has thrown light on the selection behavior of Indian retail investors towards mutual funds and life insurances particularly in post-liberalization period. With this background, their paper made an earnest attempt to study the behavior of the investors in the selection of these two investment vehicles in an Indian perspective by making a comparative study.[11]

12. Kavitha Ranganathan (2006) has examined the related aspects of the fund selection behavior of individual investors towards mutual funds, in the city of Mumbai.[12]

13. Bodla B. S., Bishnoi Sunita (2008) has concluded in their study that the mutual fund investors in India at present have as many as 609 schemes with variety of features such as dividend, growth, cumulative interest income, monthly income plans, sect oral plans, equity linked schemes, money market schemes, etc. Though both open-end and close-end schemes have registered excellent growth in fund mobilization, but currently the former category of schemes is more popular among the investors. Portfolio-wise analysis has brought that income schemes have an edge over growth schemes in terms of assets under management. Moreover UTI's share in total assets under management has come down to 11.8 percent in 2006 from 82.5 percent in 1998.[13]

MATERIALS AND METHODS

In the light of the above research, the present research paper is an attempt to study the factors influencing investment decision making for the investor. This study has been used primary data confined to Chennai metro city. The primary data was collected through structured questionnaire from the respondent of Doctors, Engineers, IT professional of the Chennai metro city. Sample size of this study consist 105 respondents. Selection of respondent investors in mutual funds used judgment sampling. While investing in mutual funds the factors that influence the investors in the study area are classified Brand name, type of fund, fund size, schemes portfolio, reputation of fund manager, past performance of the fund, liquidity factors of the mutual fund, current market conditions, dividend history, rating by rating agency, redemption facilities, prompt settlement, investor's grievance and redresses machinery, risk taking ability of the investor's, fund strength or sustainable performance.

RESULTS AND DISCUSSION

Reliability Statistics

Cronbach's alpha was calculated to measure the reliability of the questionnaire and the results have been obtained. The value of cronbach's alpha is 0.930 which is very high, thus showing the higher reliability of the instrument used in the study. This value is an evident to shows the data are collected is satisfactory because they meet the minimum acceptable level of 0.7.

Table 1: Reliability Statistics

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.931	0.930	15

Factor Analysis

Factor analysis was utilized for determining major factors influencing investor perception towards making investment decision. Based on the total variance explained, it is conformed that, there are three components alone influencing the major factors to 67% of variance it was considered based on total Eigen values one and above. Since from 4 to 14th components are having total Eigen values less than one, they have not considered, and all together they explained just 33% of variance.

Key Variables of Making Mutual Fund Investment Decision

This study is trying to identify key variables for determining mutual fund investment decision, using factor analysis. Sampling adequacy and significance was tested through KMO and Bartlett's test. The below mentioned table show that sampling adequacy of variables. KMO value justified that sampling adequacy for

this study was 84% (0.844). Bartlett's test was justified that, all the variables taken for this study were significant ($p < 0.05$). Hence factor analysis was suitable for this study.

Hence, based on rotation matrix, all the variables were categorized under three different components by fixing cut-off values as 0.5 and above. Out of these three components, first component contains five factors with heavy loading such as fund size, rating by rating agency, redemption facility, prompt settlement, fund strength or sustainable performance. Second component contains five factors with heavy loading such as types of fund, schemes portfolio, past performance, current market conditions, dividend history of the particular schemes. Finally, Third component contains four factors with heavy loading they are redemption of fund manager, liquidity factors of the mutual funds, investor grievance redresses machinery, risk taking ability of the investment manager.

Regression Analysis

Regression analysis has been used to measure the impact of independent variables on the dependent variable. The regression analysis is used to find out the relative influence of every independent variable on dependent variable. Regression was fitted to identify the determinants of mutual fund investment decision. The regression was fitted with mutual fund investment as the dependent variable mutual fund size, rating by rating agency, redemption facility, prompt settlement, sustainable features are as independent variables. R^2 value ($R^2 = 0.0685$) indicated that the % of influence of independent variables on dependent variable.

Since significant value (0.000) of independent variables less than or equal to 0.05, all those variables are considered significant variables for the regression analysis. The F value (F= 12.001) implied that ($R^2 = 0.0685$) is statistically significant and so the equation is fit for the interpretation.

Table 2: Factor Analysis - Total Variance Explained

Total Variance Explained								
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.157	51.119	51.119	7.157	51.119	51.119	3.725	26.605	26.605
2	1.192	8.511	59.630	1.192	8.511	59.630	3.211	22.938	49.542
3	1.086	7.758	67.389	1.086	7.758	67.389	2.498	17.846	67.389
4	.996	7.111	74.500						
5	.792	5.660	80.160						
6	.684	4.884	85.043						
7	.477	3.409	88.452						
8	.361	2.582	91.034						
9	.331	2.366	93.400						
10	.278	1.988	95.389						
11	.265	1.890	97.279						
12	.162	1.157	98.436						
13	.120	.857	99.293						
14	.099	.707	100.000						
Extraction Method: Principal Component Analysis.								

Table 3: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.844
Bartlett's Test of Sphericity	Approx. Chi-Square	996.347
	Df	91
	Sig.	.000

Table 4: Factor Analysis - Rotated Component Matrix

Rotated Component Matrix[a]	Component		
	1	2	3
I think that the "type of fund" influences me to invest in mutual funds		.680	
I think that the "fund size" of the mutual fund, influences me to invest in mutual funds	.570		
I think that the "schemes portfolio" influences me to invest in mutual funds		.677	
I think that the "reputation of fund manager" influences me to invest in mutual funds			.784
I think that the "past performance of the fund" influences me to invest in mutual funds		.768	
I think that the "liquidity factors of the mutual fund" influences me to invest in mutual funds			.640
I think that the "current market conditions" influences me to invest in mutual funds		.663	
I think that the "dividend history" influences me to invest in mutual funds		.567	
I think that the "rating by rating agency" influences me to invest in mutual funds	.792		
I think that the "redemption facilities" influences me to invest in mutual funds	.687		
I think that the "prompt settlement" influences me to invest in mutual funds	.835		
I think that the "investor's grievance & redressal machinery" influences me to invest in mutual funds			.710
I think that the "risk taking ability of the investor's" influences me to invest in mutual funds			.668
I think that the "fund strength/sustainable performance" influences me to invest in mutual funds	.763		
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 10 iterations.			

Table 5: Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.828[a]	.685	.632	.609

Table 6: ANOVA

ANOVA[a]					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	71.802	15	4.787	12.911	.000[b]
Residual	32.998	89	.371		
Total	104.800	104			

Table 7: Coefficients of Regression Analysis

| Model | Coefficients[a] | | | | | |
| | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
	B	Std. Error	Beta		
(Constant)	1.033	.367		2.813	.006
"Brand name"	.033	.079	.041	.418	.677
"Type of fund"	.299	.100	.310	2.975	.004
"Fund size"	.431	.110	.471	3.910	.000
"Schemes portfolio"	-.378	.092	-.358	-4.085	.000
"Reputation of fund manager"	.260	.083	.266	3.153	.002
"Past performance of the fund"	.410	.103	.395	4.000	.000
"Liquidity factors of the mutual fund"	.027	.102	.026	.269	.788
"Current market conditions"	-.108	.107	-.096	-1.010	.315
"Dividend history"	.151	.083	.190	1.821	.072
"Rating by rating agency"	-.164	.123	-.193	-1.336	.185
"Redemption facilities"	.139	.108	.160	1.279	.204
"Prompt settlement"	-.291	.129	-.331	-2.261	.026
"Investor's grievance & redressal machinery"	-.010	.085	-.011	-.113	.910
"Risk taking ability of the investor's"	-.165	.112	-.162	-1.472	.145
"Fund strength/sustainable performance"	.079	.073	.096	1.089	.279
A. Dependent variable: I am very much interested to invest my surplus fund in mutual fund					

From the above table shows that dependent variable "mutual fund investment" and there are 15 independent variables. Through regression analysis it was found, out of 15 independent variables there are seven variables relatively influence mutual fund investment decision they are, type of fund, fund size, schemes portfolio, reputation of fund manager, past performance of fund, dividend history, prompt settlement. For every unit increase in fund size and past performance, the mutual fund investment will go up 0.431, 0.410 respectively. Similarly types of fund, scheme portfolio, reputation of fund manager, dividend history, and prompt settlement influence mutual fund investment decision. For every one unit increase, mutual fund investment will go up 0.299, -0.378, 0.260, 0.151 and -0.291 respectively. There are eight independent variables not relatively influence mutual fund investment decision they are, brand name of fund, liquidity factors of fund, current market condition of fund, rating by rating agency of funds, redemption facility of funds, grievance redresses, risk taking ability of the investor, sustainability of the fund.

CONCLUSION

It is concluded from the above analysis there are various factors have been identified for taking investment decision making in mutual funds. The most important factors are fund size, rating by rating agency, redemption facility of funds, prompt settlement, and fund sustainability playing crucial role in investor taking investment decision in mutual fund. Similarly the second important factors are types of fund, scheme portfolio, past performance, current market conditions, dividend history in addition to most important factors supporting

investor to take investment decision in mutual fund investment. The other factors are also influence the investor taking investment decision are, reputation of fund manager, liquidity factors of fund, grievance redresses machinery, risk taking ability of investors. Through regression analysis it was found out some factors relatively influence the investment decision of the investor. The most influencing factors are fund size and past performance of the funds. Similarly some other factors are also influence investment decision of the investor they are, type of fund, scheme of portfolio, reputation of fund manager, dividend history of the funds and prompt settlement. Some independent variables are not relatively influence investment decision of the investor. Hence researcher suggested that, when a new investor go for investment in mutual fund before taking investment decision consider the above discussed factors, these factors will support the investor to get high return with less risk.

REFERENCES

1. Sundar C, Prakash S, Quantitative Analysis of Indian Mutual Funds: Equity Schemes, Indian Journal of Finance, 8, 2014, 20-32.

2. Rao VK, Daita N, Fundamental Factors Influencing Investments in Mutual Funds, The EIC Approach: A Case Study of RCAML, Indian Journal of Finance 6, 2013, 4-13.

3. Rathnamani V, Investor's Preferences towards Mutual Fund Industry in Trichy, Journal of Business and Management, 6, 2013, 48-55.

4. Kalpesh P, Prajapati and Mahesh K, Patel, Comparative study on performance evaluation of mutual fund schemes

of Indian companies, International Refereed Research Journal, 3(3), July 2012.

5. Pournima S, Shenvi Dhume, Prof. Ramesh B, Performance Analysis of Indian Mutual Funds with a Special Reference to Sector Funds, Indian Journal of Commerce, 64, 2011 July-September, 9.

6. Deepak Agrawal, Measuring Performance of Indian Mutual Funds, SSRN: http://ssrn.com Finance India, 2011, June

7. Anitha R, Radhapriya C, Devasenathipathi T, Comparative Analysis of Market Returns and Fund Flows with Reference to Mutual Funds, International Journal Of Research In Commerce, It & Management, 1, 2011,September, 4.

8. Singh BK, Jha AK, An empirical study on awareness & acceptability of mutual fund, Regional Student's Conference, ICWAI, 2009, 49-55.

9. Walia N, Kiran R, An analysis of investor's risk perception towards mutual funds services, International Journal of Business and Management, 4(5), 2009.

10. Sathya Swaroop Debasish, Investigating Performance of Equity-based Mutual Fund Schemes in Indian Scenario, Journal of Business Management, 2(2), 2009, 1-15.

11. Das B, Mohanty S, Shil Chandra N, Mutualfund vs Life insurance: Behavioral analysis of retail investors, International Journal of Business and Management, Vol. 3, 2008.

12. Kavitha Ranganathan, A study of fund selection behavior of individual investors towards mutual funds - With Reference To Mumbai City, http://ssrn.com/abstract, Reference 21, Citation 1, 2006.

13. Bodla BS, Bishnoi S, Emerging trends of mutual funds in India: A study across category and type of schemes, The Journal of Indian Management & Strategy, 13(1), 2008.

Source of Support: Nil, **Conflict of Interest:** None.