

## A STUDY ON FACTORS INFLUENCING FOR INVESTMENT IN MUTUAL FUND AMONG THE INVESTORS WITH REFERENCE TO MADURAI DISTRICT

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### **Abstract**

*The study is analyze that the investors hesitate to invest in the equity fund when the market is down, but the marketing and distribution costs of these, incurred during this period, do not reflect a rise of investor's choice. The purchase decision of a mutual fund is largely depend upon investors' level of savings, investment pattern of the risk profile. As a product manager in the mutual fund market one ought to design mutual fund products which shall combine an optimal mix of return, risk, liquidity and safety for the small investors. Hence it is essential to analyze the profile of investors, investors' preferences and how they rate the mutual fund schemes and what significant factors influence their rating scheme. This study helps the mutual funds and other relevant agencies in designing the new schemes and their marketing.*

### **Introduction**

An investor has various alternative avenues to invest his savings in. Hence, savings are productively invested in assets depending on their risk and return characteristics. The objective of the investor is to minimize the risk involved in investment and maximize the return from the investment. Thus rise in price or inflation erodes the value of money. Savings are invested to provide a hedge or protection against inflation. If the investments cannot earn at par with the rise in prices, the real rate of return will be negative. Thus the objectives of an investor should be maximization of return, minimization of risk and hedge against inflation. Investors can put their money to work in various ways, but well managed, diversified common stock portfolio is one of the best means to accumulate wealth over years. Mutual funds are basically institutional arrangement for pooling of funds from small investors and investing them in the best possible portfolios. Mutual funds came in India with the establishment of Unit Trust of India in 1963. Until 1987, UTI was the only mutual funds company in the country. In 1987, the public sector banks with six banks established another mutual fund whereas they remained four after two public sector banks namely Indian Bank and bank of India have closed their mutual funds since 1995-96. At the same time, GIC, LIC and IDBI also floated their mutual funds in the form of subsidiaries. The mutual funds industry expanded in 1993 with the opening of this market for private sector too. At the end of March, 2002, 37 mutual funds are operating in the country having identified composition and led to product innovation (Uppal and Kaur, 2007).

### **Investment in Mutual Funds Market**

The investment pattern among the investors is analyzed with the help of assets invested in mutual funds, number of mutual funds, number of mutual fund families, and likelihood of future mutual fund investment and perceived riskiness of mutual fund investment among the investors. The first four variables are measured by the real numbers or percentage drawn the investors. The last two variables are measured at five point scale. The investment behavior of the people is usually determined by their asset management, investment objective, security returns, tradeoff between risk and returns. The optimum portfolio composition will in general differ among investors. It will depend both on their tastes and preferences that determine their expected utility from return and risks, and on the shape and position of the efficient opportunity frontier available to them. Since the investor behavior includes the nature of investment, amount of investment, selection of fund, selection of land families, variables leading to select the MFs, attitude towards the investment on MFs, reason for switching from are found to another and also the problems encountered in investing on MFs, the investors behavior in mutual funds industry covers all these areas.

### **Need for the Study**

The new mutual fund launches has seen many of the equity based funds in the market during this period, primarily to attract investors who would like to take advantage of the low price in the stock market, but majority of the funds launched were debt funds. The investors hesitate to invest in the equity fund when the market is down, but the marketing and distribution costs of these, incurred during this period, do not reflect a rise of investor's choice. The purchase decision of a mutual fund is largely depend upon investors' level of savings, investment pattern of the risk profile. As a product manager in the mutual fund market one ought to design mutual fund products which shall combine an optimal mix of return, risk, liquidity and safety for the small investors. Hence it is essential to analyze the profile of investors, investors' preferences and how they rate the mutual fund schemes and what significant factors influence their rating scheme. This study helps the mutual funds and other relevant agencies in designing the new schemes and their marketing.

### **Statement of the Problem**

Mutual fund in itself is deemed to be an institutional entity that encompasses the commonly desired and/or schematically accumulated financial goals of the community of investors. The money collected form a plethora of sources is invested by the fund manager in various types of securities depending on their duly specified objectives. A mutual funds, therefore, in is rudimentary conceptualization, is a collection of stocks and/or bonds, where in an investors holds a share, which represents a part of the fund holding thereof. A proportionate sharing of income earned through such investors and capital appreciation

witnessed by the schemes is duly carried out. It must however be mentioned that this proportional sharing by the unit holders is governed by the number of units owned by them. Mutual fund is therefore, the most suitable investment option available for a common man as it provides an opportunity to invest in a diversified, yet professionally managed portfolio at a competitive.

#### **Objectives of the Study**

- To study the mutual fund investment decision among the investors;
- To reveal the important discriminate factors among the different customer segments in mutual funds market;
- To offer valuable recommendations.

#### **Research Methodology**

The research methodology is the way of systematically solving the research problem. It is a science of studying how research is conducted scientifically. Under it, the researcher acquaints himself/herself with the various steps generally adopted to study a research problem, along with the underlying logic behind them. The research methodology consists of research design, locale of research, sampling procedure nature of data, data collection methods, framework of analysis and imitations.

#### **Research Design**

A research design helps to decide upon issues like what, when, where, how much, by what means etc., with regard to an enquiry or a research study. It is an arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research design is the conceptual structures within which research is conducted; it constitutes the blue print for the collection, measurement and analysis of data.

#### **Selection of the Study Area**

The Madurai district was purposively selected as the study area by the researcher for the following reasons.

- The financial advisers who gave the address of investors are residing at Madurai district.
- There were no exclusive recent studies related to the investors' behavior in the Madurai district.
- The Madurai district is a growing district in Tamil Nadu. Now only the investors are giving more importance in investing on mutual funds.

#### **Nature of Data and Data Collection**

Both primary and secondary data have been used for the present study. The secondary data are collected from the books journals and various reports related to mutual

funds market in India. The data related to investors' behaviour in mutual fund market have been collected from the pre structured interview schedule.

### Tools for Analysis

#### T-Test

The 't' test has been used to find out the significant difference among the two means. It is calculated by

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(n_1 - 1)\sigma_s^2_1 + (n_2 - 1)\sigma_s^2_2}{n_1 + n_2 - 2}} \chi \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

With the degree of freedom of  $(n_1 + n_2 - 2)$  (chow, et al., 1995)

#### One-Way Analysis Of Variance

The one-way analysis of variance is used to find out the significant difference among the more than two groups regarding a particular criterion which is measured in interval scale. (Sanjeev and Rust, 1997)

$$F = \frac{\text{Greater Variance}}{\text{Smaller Variance}}$$

#### Factor Analysis

The factor analysis is a multi-variate method. It is a statistical technique to identify the underlying factors among a large number of interdependent variables. It seeks to extract common factor variance from a given set of observations. It splits a number of attributes or variables into a smaller group of uncorrelated factors. It determines which variables belong together. This method is suitable for the cases with a number of variables having a high degree of correlation. (Aaker, 1997)<sup>4</sup>.

#### Multiple Regression Analysis

The multiple regression analysis has been administered to find out the impact of independent variables on the dependent variable when both variables are in interval scale. The ordinary least square (OLS) has been followed to fit the regression model (Jacques, 1997)<sup>5</sup>. The fitted regression model is

$$Y = a + b_1X_1 + b_2X_2 + \dots + b_nX_n + e$$

#### Discriminate Analysis

The objective of discriminate analysis is to separate a population into two distinct groups or two distinct conditional ties. After such a separation is made, it should be able to discriminate one group against the other. For this purpose, a function called 'Discriminant function' is constructed. It is a linear function and it is used to describe the difference between two groups. If it is applied to identify the importance of discriminate variables among the two groups, it is called as 'two group discriminate analysis. If the groups are

more than two, it is called as multi discriminate analysis. The un-standardized procedure has been followed to establish the two group discriminate function. It is

$$Z = a + b_1X_1 + b_2X_2 + \dots + b_nX_n$$

#### Multi Discriminate Analysis

The multi discriminate analysis (Zafar et al., 1995)<sup>7</sup> have been administered to identify the important discriminate factors among Ranking -Driven Investors (RDI), active information investors (all) and advises influenced investors(ADI).

#### Confirmatory Factor Analysis (CFA)

The CFA is one of multi variate statistical tools which is applied to confirm the extracted variables in the factor by the exploratory factor analysis.

#### Analysis and Interpretation

##### Scheme preferences by the respondents

The following the table 1 shows that the respondents Scheme preferences. It consists of General/diversified equity schemes, Sector specific schemes, Debt/income schemes, Bond schemes, balanced schemes, Money market schemes, Gift schemes, Index schemes and Tax saving schemes.

**Table 1 Preferred Mutual Funds (Portfolio Basis) Among the Investors**

S.No	Type of Mutual Funds	Mean Score Among		t - Statistics
		IDI	ILI	
1	General/diversified equity schemes	2.9186	3.8684	-2.8618
2	Sector specific schemes	2.9617	3.9081	-2.7334
3	Debt/income schemes	3.7089	2.8144	2.5106
4	Bond schemes	3.7223	3.0163	2.1714
5	Balanced schemes	3.6163	3.4664	0.5069
6	Money market schemes	2.7179	3.3617	-1.2162
7	Gift schemes	3.0865	3.4143	-0.9686
8	Index schemes	2.7108	3.1416	-0.4509
9	Tax saving schemes	3.9194	3.6861	0.6866

##### Significant at five percent level

The table 1 indicates the mean score of the level of preference of mutual funds among the two group of investors and the respective 't' statistics. The highly preferred mutual funds among the individual investors are tax saving schemes, bond schemes and debt/income schemes since their respective mean score are 3.9194, 3.7223 and 3.7089. Among the institutional investors, these are sector specific schemes, general/diversified equity schemes and tax saving schemes since their respective mean score is 3.9081, 3.8684 and 3.6861.

##### Mean difference and discriminant power of investment behavior the respondents

The following the table 2 shows that the Mean difference and discriminant power of investment behavior of the respondents it consists of Amount invested in mutual funds,

Liquidity assets in mutual funds, Number of mutual funds, Number of mutual funds families, Likelihood of future mutual funds and Perceived risks of mutual funds investment.

**Table 2 Mean Differences and Discriminant Power of Investment Behavior**

S.No	Investment Behavior	Mean Score Among		Mean Difference	't' Statistics	Wilks Lambda
		IDI	ILI			
1	Amount invested in mutual funds	2.08	5.68	-3.60	-3.1486	0.3962
2	Liquidity assets in mutual funds	4.21	6.09	-1.88	-2.7184	0.3032
3	Number of mutual funds	3.73	11.49	-7.76	-3.0619	0.2678
4	Number of mutual funds families	2.46	8.61	-6.15	-2.5608	0.1042
5	Likelihood of future mutual funds	2.31	3.86	-1.55	-2.9691	0.4163
6	Perceived risks of mutual funds investment	3.86	2.57	1.29	3.1144	0.1429

**Significant at five percent level**

The significance difference among the two groups of investor has been noticed in all aspects of investor's behavior since their respective mean differences are significant at five per cent level. The higher mean difference is noticed in the case of number of mutual funds and number of mutual fund families since their respective mean differences are -7.76 and -6.15

**Mean Scores and Standardized Discriminant Function Co-Efficient Among Different Investors Groups**

The following the table 3 shows that the mean Scores and standardized discriminant function Co-efficient among different investors groups it consists of Amount invested in mutual funds, Liquidity assets in mutual funds, Number of mutual funds, Number of mutual funds families, Likelihood of future mutual funds, Perceived risks of mutual funds investment, cluster size, Eigen value percent variance explained and canonical correlation.

The ranking driven investors are high in various aspects of investors behavior namely Amount invested in mutual funds, Liquidity assets in mutual funds, Number of mutual funds families and Likelihood of future mutual fund investment since the respective mean scores are higher than in other two group of investors. The active information investors are moderate in all aspects of their investment behavior. The advisor influenced investors are very high in the aspects of perceived riskiness of mutual fund investment than the other two groups of investors. The important discriminant behavior among the three groups of investors is liquidity assets in mutual funds, amount invested in mutual funds and

number of mutual funds since their respective standardized discriminant function Co-efficient are 1.2342, 0.9816 and 0.8646 respectively.

**Table 3 Mean Scores and Standardized Discriminant Function Co-Efficient Among Different Investors Groups**

S.No	Investment Behavior	Mean Score Among			Standardized Discriminant Function Co-Efficient
		RDI	All	ADI	
1	Assets invested in mutual funds	519.08	394.07	83.34	0.9816
2	Liquidity assets in mutual funds	10.04	6.45	3.79	1.2342
3	Number of mutual funds	12.49	8.69	5.42	0.8646
4	Number of mutual funds families	9.93	7.08	4.13	0.7334
5	Likelihood of future mutual funds	3.29	3.12	3.04	0.2453
6	Perceived risks of mutual funds investment	2.46	2.81	3.59	-0.7408
7	Cluster Size	23.31	31.37	45.32	100.00
8	Eigen value				14.08
9	percent variance explained				93.46
10	Canonical correlation				0.79

significant at five percent level

#### Factors Considered for Selecting the Mutual Fund

The following the table 4 shows that the proportion of investment on mutual funds by the respondents it consists of proportion up to 10, 11-20, 21-30, 31-40 and above 40.

**Table 4 Factors Considered for Selecting the Mutual Fund**

S. No	Factors	Number of Variables in	Eigen Value	Percent of Variance Explained	Cumulative Percent of Variance Explained
1	Nature of fund	6	4.5143	19.63	19.63
2	Performance	5	3.8081	16.56	36.19
3	Company services	5	3.6509	15.87	52.06
4	Fund manager	4	2.5717	11.18	63.24
5	Personal Factor	3	1.9892	8.64	71.88
KMO measure of sampling adequacy:0.7804			Bartlett's Test of sphericity: Chi-square value:91.09		

Significant at zero percent level

The most important factor is nature of fund since its Eigen value is 4.5143. The 'Nature of fund' factor explains the variables considered for selecting the mutual fund scheme to the extent of 19.63 percent. It is followed by 'performance' and 'company services' since its Eigen values are 3.8081 and 3.6509 respectively. The variances explained by these two factors are 16.56 and 15.87 respectively. The last two factors narrated by the factor analysis is 'fund manager' and personal factor since its Eigen values are 2.5717 and

1.9892 respectively. The variances explained by these two factors are 11.18 and 8.64 respectively.

#### Mean Difference and Discriminant Power of the factors among the individual and institutional Investors

The following table 5 shows that the factors influencing to invest on mutual funds by the respondents it consists of safety, easy liquidity stability income, capital growth, transferability, tax planning, status, flexibility, speculative value, diversification, low cost of investment, regular saving, higher return, risk bearing, future planning, friends and relatives, financial advisors brokers & agents and company reputations.

**Table 5 Mean Difference and Discriminant Power of the factors among the individual and institutional Investors**

S. No	Factors	Mean Score Among		Mean Difference	't' Statistics	Wilks Lambda
		IDI	ILI			
1	Nature of fund	3.4824	3.9541	-0.4717	-2.0678	0.1862
2	Performance	3.5234	3.7438	-0.2204	-0.9693	0.5782
3	Company services	3.1867	3.8578	-0.6711	-2.6817	0.3198
4	Fund manager	3.4067	4.1156	-0.7089	-2.3301	0.1093
5	Personal Factor	3.2572	3.7496	-0.4924	-1.9903	0.2456

#### Significant at five percent level

The higher mean difference among the two group of investors have been noticed in the case of fund manager, company service and personal factors since their respective mean differences are -0.7089, -0.6711 and 0.4924. The higher discriminant power is identified in the case of fund manager and nature of fund since their respective Wilks Lambda co-efficient are 0.1093 and 0.1862. The significant mean difference is noticed in the case of factors namely nature of fund, company service, fund manager and personal factor.

#### Association between profile investors and their perception on factors influencing to mutual funds

The following table 6 shows that the association between profile investors and their perception on factors influencing to invest in mutual funds it consists of age, sex, level of education, occupation, personal income, family size, Number of earning members per family, Family income, Monthly savings, Risk orientation, Knowledge on financial market, Scientific orientation, Years of experience and Proportion of investment on to total investment.

Regarding the perception on nature of fund, the significantly associating profile variables are level of education, personal income, family size, number of earning members per family, family income, monthly savings, risk orientation, and knowledge on financial market, since their respective 'F' statistics are significant at five per cent level. The significantly associating profile variables with the perception on performance factor are

level of education, occupation, personal income, family size, family income, monthly savings, risk orientation, knowledge on financial market, scientific orientation, years of experience and the proportion of investment on mutual funds to total investment. Regarding the perception on company services factor, the significant difference among the investors have been identified when they classified on the basis of family income, monthly savings, knowledge on financial market and proportion of investment on mutual funds to total investment. The significantly associating profile variables regarding the perception on fund manager factor are age, occupation, personal income, number of earning members per family, family income, knowledge on financial market, and years of experience.

Table 6

S. No	Profile variables	f-statistics				
		Liquidity	Savings	Income	Motivation	Value-Added Gain
1	Age	2.7085	1.8684	2.0678	2.4082	2.3962
2	Sex	3.0182	1.9962	3.5081	3.114	2.4086
3	Level of education	2.5084	2.7086	1.9962	2.5059	2.3968
4	Occupation	2.2108	2.6861	2.6861	2.4147	1.9967
5	Personal income	2.5096	2.8693	1.8449	2.6903	1.3443
6	Family size	2.4567	2.6069	1.9334	1.8108	1.9967
7	Number of earning members per family	2.6508	2.0497	2.2097	2.3868	2.0347
8	Family income	2.7086	2.7138	2.4517	2.4503	2.6163
9	Monthly savings	2.3893	2.4082	2.3864	2.0863	2.0117
10	Risk orientation	2.8962	2.9193	1.3944	1.9903	2.1082
11	Knowledge on financial market	2.4543	2.7142	2.4508	2.7171	2.3908
12	Scientific orientation	2.0811	2.6909	1.3464	1.6503	1.7174
13	Years of experience	2.1149	2.8917	2.0676	2.8183	2.5089
14	Proportion of investment on to total investment	2.0983	2.5082	2.3939	2.0214	1.8681

Significant at five percent level

### Summary of Findings, Recommendations and Conclusion

#### Summary of Findings

1. The highly considered factors to select the mutual fund scheme among the individual investors are performance and nature of fund. Whereas among the institutional investors, these are fund manager and nature of fund. The important discriminant factors among the individual and institutional investors are fund manager and nature of fund.
2. The factors considered for selecting the mutual fund identified by the factor analysis are the nature of fund, performance, company services, fund manager and

personal factor. The important variables in the 'nature of fund' factor are fund objectives and credibility of sponsors whereas the important variables in the performance factor are dividend and expenses charges.

3. The significantly associating profile variables with the perception on factors leading to select the mutual funds are knowledge on financial market, level of education and family income. Regarding the perception on performance factor the significant associating profile variables are level of education, personal income, family size, family income, monthly savings, risk orientation, knowledge on financial market, scientific orientation, years of experience and the proportion of investment on mutual funds to total investment.
4. The important decision variables to invest on mutual funds among the individual investors are liquidity factors, risk involved in mutual fund and current market conditions. Among the institutional investors, these are reputation of fund manager, type of fund and past performance of the fund.
5. The significantly associating profile variables with the perception on decision variables among the investors are monthly savings, risk orientation, family income, personal income and occupation.

### **Recommendations**

#### **Quality of the Fund Manager**

Quality of the Fund Manager is the key to good performance of any AMC. A very good performing scheme may suddenly start underperforming because of the change in the managers.

#### **Promotional techniques**

The mutual funds companies should increase their advertisement budget. They should distribute the pamphlets and brochures among walk in the banks. Since, proper counseling by banks, AMCs and agents will motivate the investors, the companies should train their relevant people to promote the investment on financial market.

#### **Differentiated product**

The individual investors and institutional investors vary according to their level of expectation and perception on mutual funds. The factors leading to invest on mutual funds and selection of mutual fund scheme are also differing from each other. The mutual funds company should analyze the need of various investors and design the mutual funds according to the need of various segments.

### **Conclusion**

The present study concludes that the institutional investors are well versed than the individual investors in the mutual fund market. The important factors leading to invest on mutual funds are level of education, occupation, personal income, family size, family income, monthly savings, risk orientation, knowledge on financial market, scientific

orientation, and years of experience and the proportion of investment on mutual funds to total investment. The factors considered to select the mutual fund schemes are the nature of funds, performance, company services, fund manager and personal factor. The important decision variables influencing the investment on mutual funds are liquidity factors, risks involved and current market conditions. The higher gaps are identified among the individual investors than the institutional investors. The important reasons for switching from one fund to another are consistency in performance, past performance and fund managers efficiency. The important problems identified by the investors are performance, fund management, company, service and market. The profile of the investors plays its own role in the investors' behavior. Since the scope of mutual fund market is very under in India, the company realizes the needs of the different class investors and designs the product according to their needs. The service quality of the mutual fund company is the only way to wider their market base.

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