



A Study of Risk Orientation of Retail investors in Indian Mutual fund Industry with special Reference to Rajasthan, India

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ABSTRACT

Mutual Funds markets are constantly becoming more efficient by providing more promising solutions to the investors. Mutual funds industry is responding at a good pace and understanding the investor's perception, still they are continuously following this race in their attempt to differentiate their products responding to sudden changes in the economy. The need of an hour is to analyze investor's perception and expectations, and share important information to support financial decision making of mutual funds. Financial markets are becoming more exhaustive with financial products looking for new innovations and to some extent innovations are also visible in designing mutual funds portfolio but these changes need arrangement in accordance with investor's expectations the risk they perceive, the knowledge they possess about the mutual fund industry. The risk orientation represents the risk bearing capacity and interest of the investors. Even though, the mutual funds is a risk less investment avenues in the capital market, it is also involved with market risks. The risk orientation among the investors is highly essential to invest on mutual funds and their investment behaviour. Thus, it has become essential to study mutual funds from a different angle, i.e. to focus on investor's expectations and discover the unidentified parameters that account for their dissatisfaction.

In order to achieve the objective of developing an understanding about retail investor's risk orientation, and knowledge regarding the mutual funds a well structured questionnaire was designed. Responses of retail investors were collected through filled questionnaire with pre explained objectives of research. The pre structured questionnaires were distributed among those investors only who had prior experience of mutual fund investment. For this selective systematic sampling was taken for consideration. For reliability of questionnaire 524 individual investors were selected from six cities of Rajasthan namely Ajmer Jaipur Udaipur, Jodhpur, Bikaner and Kota. Main focus of questionnaire was to obtain responses of retail investors regarding how they evaluate mutual funds services in terms of risk orientation, and knowledge on their investment. The main objective of this research paper includes:

Objective 1 To examine whether the life cycle influences the Risk Orientation of retail investors in the state of Rajasthan.

Objective 2 To study the perception of risk involved in Mutual Fund by retail investors.

Present research paper identifies the Risk orientation, among the Retail investors Regarding Indian mutual fund industry with the help of Regression Analysis and Chi Square test and factor analysis. A study at aggregate level tested by chi-square test is also depicted.

KEYWORDS : Mutual Funds (MFs), Investor's expectations, Risk Orientation, scientific Orientation Knowledge, Retail investors

INTRODUCTION

Mutual fund investors face a dilemma of persistency in the performance of successful mutual fund managers to offset the costs of chasing past good performance. In most professional fields, such as corporate management and law, practitioners vary in ability. Professionals are evaluated on the basis of past performance. By analogy, one would expect mutual fund managers to vary in ability and past performance to be indicative of ability.

For the individual investor, there are at least two potential drawbacks to chasing past performance. First, if one sells a currently held fund to buy a winner, this will accelerate the recognition of capital gains, thus imposing a tax penalty when done in a taxable account. Second, top performing funds tend to charge higher operating expenses and to have higher turnover. High operating expenses and high turnover represent a drag on a fund's gross performance, while high turnover further accelerates the recognition of capital gains. Thus, if the fund's superior gross performance fails to persist, its performance net of fees, expenses, and taxes is likely to be sub-par. While a particular investor may benefit from chasing performance, investors in aggregate do not. If investors overestimate their ability to identify superior funds based on past performance, this will lead to over-investment in active management.

Rajasthan has a large number of small investors belonging to the middle class households. Rajasthan has a very good financial infrastructure and access to large volume of NRI funds. The savings rate in Rajasthan is very high compared to other states. Though investors and investor behaviour differ, the ultimate goal of an investor is attaining high return. There are different investment avenues, but the problem has been selecting the most remunerative and appropriate of them. Some are simple, others complex, some guarantee fixed returns while others involve high risk, some investments are appropriate for one type

of investor and another may be suitable for another investor.

The present study attempts to understand the behaviour of individual investors in the Mutual fund market in the State of Rajasthan. Rajasthan seemed to have everything going in its favour to build the largest number of investors in industrial securities. However, very little data are available on the behaviour of individual investors in Rajasthan. Hence this study is the first study of its kind for Rajasthan which attempts to explore the risk orientation of individual investors in the mutual fund industry

Performance chasing pours more money into funds with high expense ratios and high turnover. Expense ratios are a drain on investors' returns; in addition to accelerating capital gains taxes, high turnover increases trading costs. In aggregate, fees, taxes, and trading costs represent an unambiguous loss to investors (though a boom to those who charge these fees). Grossman and Stiglitz (2010) show that in equilibrium rational investors allocate money to active and passive strategies in proportions that leads to equal risk-adjusted expected returns to both strategies.

Behavioral finance models that incorporate overconfidence (e.g., Odean (2008)) provide an even stronger prediction: active investment strategies will underperform passive investment strategies. Historically, active management has underperformed passive management, suggesting that too many resources have been devoted to security research, resulting in sub-optimal returns to investors.

In addition, by chasing performance, investors create agency conflicts with fund managers (and more generally fund providers). As noted by several studies (e.g., Chevalier and Ellison (2007), Brown, Harlow, and Starks (2006)), the convex relationship between cash flows and performance may lead managers to focus on obtaining top performance sta-

tus rather than focusing on maximizing risk-adjusted expected returns. And fund providers may start many funds with the intention of continuing (and advertising) only those with good performance. This practice is likely to give investors a biased view of how well the average fund is performing and to encourage further performance chasing. Selling winning funds, while holding your losers, is clearly an investment mistake. There is strong empirical evidence that losing mutual funds repeat. Thus, divesting one's losing funds would enhance investor returns. And, again, selling winning rather than losing funds leads to the unnecessary recognition of capital gains, thus imposing a tax penalty when done in a taxable account. Finally, it was found that the investors react differently to various fund expenses.

LITERATURE REVIEW

Studies relating to investment expectations

1. Huge literature available on predicting stock market returns has proved that generally investors think high past stock market return predict high future return (De Bondt, 1993) even though there is no support for such belief in the data (Fama 1988).
2. Further, evidence by Fisher and Statman (2000) have shown that individual investor's stock market return expectations are positively correlated with past returns.
3. An attempt to relate stock expected returns and interrelated attributes can be well traced from Asset pricing Model that explains an assets expected return is positively related to its systematic market risk (Black 1972). The crux of these models is that risky portfolio yields higher return.
4. Although majority of investors who invest in mutual fund themselves are not clear with the objective and constraints of their investment but in addition to this most important critical gap that exist in this process is lack of awareness about presence of risk elements in mutual fund investment. The new marketing philosophy and strategies place special emphasis on recognition of customer needs in an effort to provide high level of quality services (Harrison, 2000).
5. Panda and Nalini (2001) evaluated the cause and effect relationship between mutual fund investment decision mutual fund products are core product, investors expectation, service behaviour, persuasive promotion and investor confidence. The buying intent of a mutual fund product by small investor can be due to multiple reasons depending upon customers risk return trade off
6. Patel et al., (2002) found the most important factors leading to invest on mutual fund is the customer use factors other than return and risk. The customer use factors are the diversification, liquidity, transparency, performance, management, fees, fund managers' efficiency and reputation, flexibility and accessibility and switching possibilities.
7. Kaul and Gupta (2006) analysed the investors' perception on various reasons to select the mutual fund scheme. These are risk capacity and tolerance, liquidity needs, specific objectives, credibility of the sponsors, investment philosophy of the fund, performance of the scheme, dividends, entry and exit loads, expenses charged to the fund and services offered by the fund.
8. Study by Laukkanen (2006) explains that varied attributes present in a product or service facilitate customer's achievement of desired end-state and the indicative facts of study show that electronic services create value for customers in service consumption.
9. Return ambiguity and changes in risk perception of individual investor affect action taken in risky financial market. In a more complex situation taking rational decision is undoubtedly difficult but certainly not impossible. Computational complexities are not only the reason why rationality assumption is challenged rather challenges also come from cognitive reasoning (Anderson 1991) where question is how optima human beings are.
10. A more realistic notion of rationality is bounded rationality defined by Simon (Simon 1957) that property of an agent who behaves in a manner that is nearly as optimal with respect to its goals as resource will allow. Here resource includes processing power, algorithm and time available to the agent.

Uncertainty of Investor's Expectations

1. Zeithaml, V (1993) expressed satisfaction of individual investor comprise of a range of varied parameters and is not easy to define but in general it means positive assessment. Where the growing demand of investor's expectation is following the way most of researcher admit the fact that working of customer's mind is a mys-

tery which is difficult to solve (Dash, 2006).

2. Customer satisfaction is subjective and even difficult to measure. To draft an accurate picture of customer satisfaction organizations should diligently use information – collecting tools and market research that will finally enable an organization to identify critical elements of customer satisfaction and further fine-tune their operations to achieve incremental improvements. Significant gaps that exist between service expectations and perceptions is right from the first step where AMCs are not found capable enough to translate investor's expectation, reason being financial intermediaries having inadequate knowledge and training are not able to communicate the message to each player effectively.
3. Narasimhan and Vijayalakshmi (2000) revealed that mutual fund is a new instrument for investment for both rural and urban investors in India. It showed that units of mutual funds are not much popular among the investors irrespective of their locations.

Tolerance Zone: Risk

1. Williams (1964) proposed that sense of unpredictability of actual results of an action differing from possible predicted results in a given situation. Risk not only includes uncertainty and loss elements but time factor cannot be excluded from probability of risk. Doubt concerning the outcome in a given situation before the event occurs implies that there is something about the present situation that will be different in the future.
2. Tolerance Zone depicts the minimum and maximum specifications as described by investor for his willingness to assume risk represented by Upper Specification Limit and Lower Specification Limit. Investors based on his knowledge about the market volatility where he accepts the minimum risk, which he will have to bear on his investment, design these specification limits and maximum level is assumed depending upon his risk appetite and his willingness to maximize his ROI. However, Lack of management's commitment for services performance may deviate AMCs to come up with different performance standards. This deviation if less than the expected specification as proposed by investor will result in indifferent attitude of investors but in case the controllable limit as performed and delivered exceeds the upper specification limit of investors, it will certainly result in great dissatisfaction among the investors as AMCs will be held liable for the loss that will accrue to investors and that will lead investors think over incompetent professional management of mutual funds.

OBJECTIVES

- **Objective 1** To examine whether the life cycle influences the Risk Orientation of retail investors in the state of Rajasthan.
- **Objective 2** To study the perception of risk involved in Mutual Fund by retail investors.

DATA COLLECTION AND ANALYSIS

The study is primarily based upon primary data collected from a structured survey through questionnaire. The survey was conducted on 524 respondents in person. All the variables were measured by response on five point Likert scales, which rated 1 as least important and 5 as most important.

The collected data was analyzed through statistical tools like mean, standard deviation, correlation, regression, Chi square test. To measure internal consistency (reliability) of the data Cronbach Alpha test has been employed. The study further employs Kaiser-Meyer-Olkin Measure of sampling adequacy, Bartlett's Test of Sphericity and factor analysis as a tool of dimension reduction.

HYPOTHESIS

Hypothesis 1 Risk orientation and life cycle are independent attributes in mutual fund investment

Hypothesis 2 Increase in age decrease the risk tolerance

RESULTS AND FINDINGS

Investors' Risk Orientation

The risk orientation represents the risk bearing capacity and interest of the investors. Even though, the Mutual Fund is a risk less investment avenues in the capital market, it is also involved with market risks. The risk orientation among the investors is highly essential to invest on Mutual Funds and their investment behavior. The risk orientation

among them was measured with the help of some related statements. The investors were asked to rate these statements at five point scale. With the help of the mean score on the statements, their level of risk orientation was confined to very high, high, moderate, low and very low. The distribution of investors on the basis of their risk orientation has been shown in Table 1

Table 1
Investors' risk orientation

S.No	Risk Orientation among the Investors	Mean score	%
1	Very high	73	14
2	High	196	37
3	Moderate	137	26
4	Low	72	14
5	Very low	46	9
	Total	524	100

Figure 1
Sample distribution: Investors' risk orientation

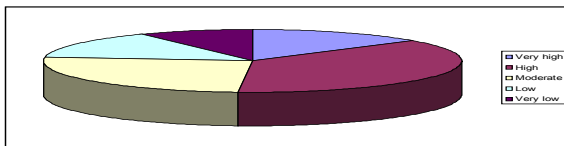


Table 2
Risk Orientation among the Investors

One-Sample Kolmogorov-Smirnov Test								
	N	Normal Parameters ^{a,b}		Most Extreme Differences			Kolmogorov-Smirnov Z	Asymp. Sig. (2-tailed)
		Mean	Std. Deviation	Absolute	Positive	Negative		
SMEAN(Risk is everywhere)	528	1.985	.9661	.308	.308	-.182	7.079	.000
SMEAN(Risk leads to return)	528	2.374	.8610	.255	.255	-.194	5.862	.000
SMEAN(Risk is always rewarded)	528	2.750	1.0144	.221	.221	-.160	5.075	.000
SMEAN(Risk bearing is a required quality of investors)	528	2.912	1.0345	.192	.192	-.179	4.406	.000
SMEAN(Risk involves pleasure)	528	3.177	1.2734	.186	.186	-.146	4.276	.000
SMEAN(Age)	528	2.06	1.268	.267	.267	-.201	6.141	.000
SMEAN(gender)	528	1.19	.389	.490	.490	-.315	11.260	.000
SMEAN(Personal Income per month)	528	2.02	1.251	.290	.290	-.208	6.664	.000

a. Test distribution is Normal.
b. Calculated from data.

The test have conducted on the revised dataset where the missing values of each item is replaced with mean of near by points & tested for normality & found all the scale items are normal(P<.05)

Table 3

Independent Samples Test				
		Risk is everywhere		
		Equal variances assumed	Equal variances not assumed	
Levene's Test for Equality of Variances	F	2.794		
	Sig.	.095		
t-test for Equality of Means	T	.403	.463	
	Df	520	174.774	
	Sig. (2-tailed)	.687	.644	
	Mean Difference	.0439	.0439	
	Std. Error Difference	.1090	.0948	
	90% Confidence Interval of the Difference	Lower	-.1357	-.1129
		Upper	.2235	.2008

We can find the T – value is greater than the P value measured with 90% of confidence interval , so hypothesis-1 "life cycle" have significant effect on risk" is find true as Ho is rejected

Table 4

ANOVA					
Risk bearing is a required quality of investors					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.453	4	1.863	1.738	.140
Within Groups	556.509	519	1.072		
Total	563.962	523			

We can find from the 1-way Anova that F – value is greater than the P value measured with 90% of confidence interval , so hypothesis-2 "age have significant effect on risk bearing" is find true as Ho is rejected

Factors Considered for Selecting the Mutual Fund Scheme

The factors considered for selecting the Mutual Fund scheme among the investors was derived from the score of the variables considered to select the Mutual Fund scheme. The factor analyses have been administered to narrate the variables into factors. Initially, the tests of validity of data for factor analysis have been conducted with the help of KMO measure of sampling adequacy and Bartlett's test of sphericity. The resulted KMO measure of 0.701 and zero per cent level of significance of chi-square value satisfy the validity of data for factor analysis. The factor analysis results in five important factors. The factors, its eigen value and the per cent of variance explained by the factor have been illustrated in Table 5

Table 5

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.826	.825	23

We can see from the Table, that Cronbach's alpha is **0.826** .This was compared with all extraction coefficients and researcher come to know that there is a high level of internal consistency for our scale with this specific sample for further study.

Table 6

KMO and Bartlett's Test ^a		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.701
Bartlett's Test of Sphericity	Approx. Chi-Square	3607.417
	Df	253
	Sig.	.000

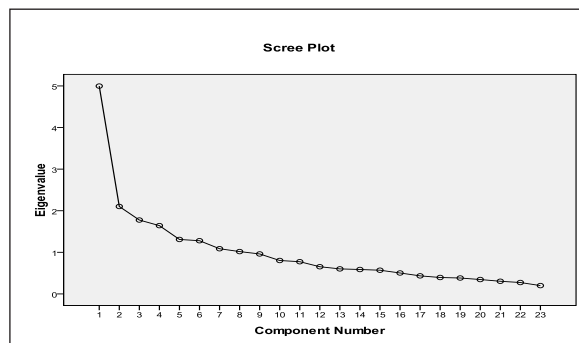
We can see from the Table, that Bartlett's Test of Sphericity Sig is **.000**, this shows that factor analysis is appropriate for this type of data & the sample size is adequate to run factor analysis with **.701**

Table 7
Total Variance Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.932	21.661	21.661	4.932	21.661	21.661
2	2.073	9.012	30.654	2.073	9.012	30.654
3	1.776	7.721	38.175	1.776	7.721	38.175
4	1.628	7.078	45.253	1.628	7.078	45.253
5	1.326	5.807	51.059	1.326	5.807	51.059
6	1.200	5.654	56.713	1.200	5.654	56.713
7	1.110	4.826	61.539	1.110	4.826	61.539
8	1.020	4.434	65.973	1.020	4.434	65.973
9	.984	4.193	70.166			
10	.906	3.904	73.689			
11	.756	3.287	76.957			
12	.670	2.914	79.871			
13	.609	2.647	82.518			
14	.590	2.566	85.084			
15	.564	2.451	87.534			
16	.505	2.197	89.732			
17	.430	1.870	91.601			
18	.396	1.721	93.322			
19	.383	1.665	94.988			
20	.352	1.530	96.518			
21	.312	1.356	97.874			
22	.283	1.230	99.103			
23	.206	.897	100.000			

The above table shows that eigenvalues associated with each linear component (factor) before extraction, after extraction and after rotation. Before extraction, SPSS has identified 23 linear components within the data set (we know that there should be as many eigenvectors as there are variables and so there will be as many factors as variables). The eigenvalues associated with each factor represent the variance explained by that particular linear component and SPSS also displays the eigenvalue in terms of the percentage of variance explained so, factor 1 explains 21.44% of total variance and factor 2 explained 9.01% of total variance

Figure 2



The scree plot shows that after variable 2 there is a point of inflexion on the curve. Thus we can probably justify retaining 2 factors. Given the large sample, it is probably safe to assume Kaiser's criterion; however, we can analysis specifying that SPSS extract only two factors and compare the results

CONCLUSION

The risk orientation represents the risk bearing capacity and interest of the investors. Even though, the Mutual Fund is a risk less investment avenues in the capital market, it is also involved with market risks. The risk orientation among the investors is highly essential to invest on Mutual Funds and their investment behavior. The most important factors were Risk capacity, Company name, Credibility of sponsors, Peer group, Tolerance, Risk adjusted return, Fund objectives, Type of portfolio. It was thus proved that there is a significance relationship between the age and the risk behaviour and on this bases we can sum up by saying that as people grow their risk appetite becomes low and instead of being risk takers they are more prone to avoid risk.

Extraction Method: Principal Component Analysis.

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