Original Research Paper

Statistics

A STATISTICAL ANALYSIS OF THE FACTORS AFFECTING THE MUTUAL FUND MARKET IN THE TRIBAL ASSEMBLY SEATS OF CENTRAL GUJARAT

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ABSTRACT An unchallengeable fact is that not a single industry can flourish without a proper regulatory mechanism. Mutual funds have delivered value to the investors so far and that is why they form an important segment of financial markets. Here are some initiatives which would help to make the Indian mutual fund industry more vibrant and competitive. The need of study has been aroused in order to see the factors influencing the retail investment regarding the mutual funds in the seats of **Gujarat Legislative Assembly reserved for Scheduled Tribe candidates** such as **Santrampur Assembly Seat in Mahisagar District, Morva Hadaf Assembly Seat in Panchmahal District, Dahod, Fatepura, Jhalod, Limkheda and Garbada Assembly Seats in Dahod District and Chhota Udaipur, Jetpur and Sankheda Assembly Seats in Chhota Udaipur District in the tribal dominated districts of Central Gujarat.** We shall apply hypotheses as under:
Null Hypothesis H_0: Investment and education do not depend on each other as far as investment is concerned. **v/s Alternative Hypothesis H_1 :** Investment and education depend on each other as far as investment is concerned.

INTRODUCTION:

During last few years, the Indian capital market has been increasing in a tremendous manner. Many developments have taken place in the Indian financial market with the reforms in the field of economy, industrial policy, public and financial sectors. As a result, the economy has opened up. Indian mutual fund industry came into existence in the year 1963 as a part of development in the capital market. It has become an important and dynamic sector of the Indian capital markets particularly in the past five years.

Literature Review:

*   **Haslem, Baker and Smith (2008)** made an attempt to investigate the relation between performance and expense ratios of 1,779 domestic, actively managed retail equity funds and came to the conclusion that on an average, superior performance occurs among large funds with low expense ratios, low trading activity and no or low front-end loads.
*   **Agarwal R.K. et al. (2010)** reviewed that the performance of mutual funds received a great deal of attention from both practitioners as well as academics. An aggregate investment of trillion dollars in India shows the interest of the public in investment field. For healthy investments, our aim is to identify the out performers. For the better evaluation of these funds, we have ranked the investment opportunities based on various adjusted ratios like **Sharpe Ratio**, **Jensen Measure**, **Fama Ratio**, **Sortino Ratio**, **Treynor's Ratio,** etc. Therefore, an attempt has been made to capture the critical measures of performance evaluation of mutual funds.
*   **Cao, Ghysels & Hatheway (2011)** have investigated global funds and specialized domestic equity fund. It was found on the basis of their studies that risk and return characteristics of these two groups of funds are significantly different from funds employing derivatives sparingly or not at all.
*   **Agapova (2011)** found that cash flow volatility is positively and negatively related as far as investment and opinions related to investments in the families are concerned.
*   **Giridhari Mohanta & Dr. Sathya Swaroop Debasish (2011)** studied that investors invest in different fields to fulfill their financial, social and psychological needs.

Need and objective for the Study:

It was revealed on the basis of study that risk orientation influenced the investment as far as demographic factors like gender and age are concerned in the tribal areas of the above mentioned assembly seats of Gujarat Assembly and study the investment behaviour of the individual investor with risk orientation.

METHODOLOGY:

*   Our questionnaire consisted of total 40 questions out of which first
*   15 questions were related to the demographic factors influencing the investors.
*   Next 5 questions were to find the risk orientation of the investor and the remaining questions were to find the other objectives.
*   The survey was conducted with a sample size of 250 investors in the legislative assembly segments reserved for scheduled tribe candidates in Central Gujarat.
*   Here, we shall discuss the risk orientation and investment trend in mutual funds. We have carried out the analyses on the basis of the responses of the questionnaire, for which we have used **ONE WAY ANOVA** as the statistical tool.

Survey Analysis:

Risk tolerance always tends to be subjective rather than objective as far as the expert's opinion is concerned. Uncertainty factor and the lack of financial knowledge about the returns over investments avenues among the investors are the important components of any investment.

Testing of Hypothesis:

Here, ONE-WAY ANOVA Technique is used at **5% level of significance** to compare average investment of response in mutual fund and risk orientation of investor. The p-value of risk is everywhere is shown in **ANOVA Table 1**. The effect of risk is everywhere on investment which is not significant is shown in **ANOVA Table 2**. The effect that risk leads to return are significant is shown in **ANOVA Table 3**.

Null Hypothesis (H_0) and Alternative Hypothesis (H_1) are stated above.

ANOVA TABLE 1: (FOR ALL INVESTORS)

Testing of Hypothesis Source	Sum of Squares	Degrees of Freedom	Mean Squares	F-ratio	p-value
Risk Factor is found everywhere	1143.690	1	1143.690	4.70	0.0185
Error	61800.062	254	243.307		

ANOVA TABLE 2:

Test of Hypothesis Source	Sum of Squares	Degrees of Freedom	Mean Squares	F-ratio	p-value
Taking risk be considered as a required quality of investors	12.368	1	12.368	5.351	0.0361
Error	342.064	148	2.311		

ANOVA TABLE 3:

Test of Hypothesis Source	Sum of Squares	Degrees of Freedom	Mean Squares	F-ratio	p-value
There is relatively low risk	47.362	1	47.362	18.899	0.0800
Error	591.464	236	2.506		

CONCLUSION:

On the basis of the results obtained as per the ONE WAY ANOVA TECHNIQUE, we can clearly say that investors with at least a graduate degree or more have more than average investment in the mutual fund market. So we conclude that investors with variations in the educational qualification differ in average investment in mutual fund market. That is why our study looks at the perception level of the investors towards investment in the mutual fund market.

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