Risk Analysis in Mutual Fund Companies Changing Landscape – A Study

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Abstract

This paper studies the trends in mutual fund companies and risk associated with various MF instruments. The mutual funds is one of the important classes of financial intermediaries enabling tens of thousands small and large savers across India to participate in and get the benefits of the capital market. The involvement of mutual funds in the transformation of India’s economy makes it all the more important to review their services for their role in mobilization and allocation of funds in the markets. The mutual funds have a lot of potential to grow but to capitalize the potential fully, however, the need is to create and market innovative products and frame distinct marketing strategies. Moreover, the equity culture has not yet developed fully in India as such, investor education would be equally important for greater penetration of mutual funds. As such mutual funds are expected to perform better than the market, therefore calls for a continuous evaluation of the performance of funds. In an academic perspective, the goal of identifying superior fund managers is of great interest due to the challenges it provides to the efficient market hypothesis. The present study looks into the risk and return analysis of the select mutual funds in India.

Since its inception, the mutual fund industry has come a long way in India, the remarkable growth in the Indian mutual fund industry can be ascribed to multiple factors like, rise in savings of household, all-inclusive regulatory framework, and satisfactory tax policies, start of several new products, investor educational campaigns and the role of brokers. More pleasing aspect of the Indian fund market is that it has graduated from offering plain vanilla equity and debt funds, to an array of diverse products such as capital protection oriented funds, exchange traded funds, gold funds, and even the native funds. Although, the fund industry in India has achieved many milestones yet the potential that it enjoys remains unrealized. For example, assets under management as a percentage of GDP for India is about 5 to 6 percent, significantly lower than some other emerging economies like Brazil and South Africa having 40 percent and 33 percent respectively. The other fact is that the fund industry in the country is yet to spread its reach beyond Tier-I cities which accounts for around 74 percent of the fund folios as on September 2013. There is also an interplay of cultural and behavioral factors which prevents savings from being streamlined into mutual funds.

Keywords: Mutual funds, Risk, Return, Investors, Sharpe Index, Treynor’s Index
Introduction

A composite portfolio evaluation technique regarding the risk-adjusted returns was used by Jensen (1968). The researcher evaluated the ability of 115 fund managers in selecting securities during the period 1945-66. Analysis of net returns indicated that, 39 funds had above average returns, while 76 funds yielded abnormally poor returns. Using the gross returns, 48 funds showed above average results and 67 funds below average results. On the basis of the study Jensen concluded that there was very little evidence that funds were able to perform significantly better than expected as fund managers were not able to forecast securities price movements.

The most prominent study by Sharpe (1966) developed a composite measure of return and risk. The researcher evaluated 34 open-end mutual funds for the period 1944-63. The study revealed that the reward to variability ratio for each scheme was significantly less than DJIA and ranged from 0.43 to 0.78. Also, it reveals that expense ratio was inversely related with the fund performance, as correlation coefficient was 0.0505. The results showed that notable performance was linked with the low expense ratio and not with the size. Also, the sample schemes showed consistency in risk measure. The performance of 86 funds with random portfolios was compared by Irwin et al. (1970). The study has concluded that, mutual funds performed badly in terms of total risk. Funds with higher turnover outperformed the market. The size of the fund did not have any impact on their performance. The methods to distinguish observed return due to the ability to pick up the best securities at a given level of risk from that of predictions of price movements in the market was developed by Fama (1972). The researcher, introduced a multi-period model allowing evaluation on a period-by-period and on a cumulative basis. The researcher explained that the return on a portfolio constitutes return for security selection and return for bearing risk. His contributions combined the concepts from modern theories of portfolio selection and capital market equilibrium with more traditional concepts of good portfolio management.

The investment performance of 40 funds was analyzed by Klemkosky (1973) based on quarterly returns during the period 1966-71. The researcher acknowledged that, the biases in Sharpe, Treynor, and Jensen’s measures, could be disinterested by using mean absolute deviation and semistandard deviation as risk surrogates associated to the composite measures resulting from the capital asset pricing model. Khare (2007) opined that investors could purchase stocks or bonds with much lower trading costs through mutual funds and enjoy the advantages of diversification and lower risk. The researcher identified that, with a higher savings rate of 23 percent, channeling savings into mutual funds sector has been growing rapidly as retail investors were gradually keeping out of the primary and secondary market. Similarly, the results and conclusions made by Ippolito (1989) were relevant and consistent with the theory of efficiency of the informed investors. Also, Fortin and Michelson (1995) studied 1326 load funds and 1161 no-load funds and has found that, no-load funds had lower expense ratio and were suitable for six years, while the load-funds had higher expense ratio and so had fifteen years of average holding period. No-load funds offered superior results in nineteen out of twenty-four schemes. Based on these findings, the researcher has concluded that the mutual fund investor had to remain invested in a particular fund for very long periods to recover the initial frontend charge and achieve investment results similar to that of no-load funds. An analysis of the implications of conditioning information variables on a sample of Portuguese stock funds was attempted by Cortez and Silva (2002). The researchers identified that unconditional Jensen’s alpha ensured superior performance till incorporation of public information variables. Alpha was not statistically different from zero while beta was related to public information variables. While, Rohleder et al. (2014) used a matched sample of 2,588 actively managed U.S. domestic equity funds from the CRSP mutual fund database and the SEC’s N-SAR filings, they detect cross-sectional differences in the response of funds to flow risk. The researcher also found that the funds using complex instruments, such as derivatives and leverage strategies, have higher performance than non-using funds. The study also showed that this outperformance is not a result of employing complex
instruments for stock-picking or market-timing activities. Rather, user funds are able to mitigate parts of the adverse relation between investor flows and risk-adjusted performance with complex instruments.

Objective:

This paper intends to evaluate risk analysis and the performance of selected growth schemes using Risk Return Analysis. To compare all the measures against the markets to distinguish performers.

Mutual funds with financial intermediaries

Mutual funds are one of the financial intermediaries of the Indian financial system that mobilize savings and facilitate the allocation of funds in an efficient manner. As ample evidence that Indian financial institutions have played a dominant role in asset formation and intermediation, and contributed substantially to the process of macroeconomic development. Mutual funds, which have emerged as strong financial intermediaries, are playing an important role in this process. They are not only providing stability to the financial system, but have also helped rationalize the process of resource allocation. Conceptually, a mutual fund is a single large professionally managed investment organization that combines the money of many individual investors having similar investment objectives. It invests this money in a wide variety of securities and individual investors share its income and expenses, its profits and losses, its capital appreciation and growth in proportion to their shareholdings. In other words, a mutual fund is a type of an investment institution, which mobilizes savings of individuals and institutions and channelizes these savings in corporate securities to provide investors a steady stream of returns and capital appreciation. Thus, the two prime advantages of investment in

Mutual funds diversification and professional investment

Classes and correlate with their risk characteristics in order to verify whether there is always a positive relation between risk and return across all asset classes and to find out the portfolio mix of the various asset classes corresponding to the desired return and risk. Kholkin and Haug (2016) applied dataset consists of 74 Norwegian open-end equity funds with monthly observations. On average, they found quite low significance of all used models, compared to basic Capital Asset Pricing Model and excluding the Carhart (1997) model. Also, they found that funds with a top high idiosyncratic volatility have lower returns than other funds. More ever, they also found that funds with close to mean idiosyncratic volatility have the highest returns. Grinblatt et al. (2016) reveal stark differences between the investment philosophy and skill of hedge funds and mutual funds. Hedge funds tend to buy stocks with low past returns, while mutual funds tend to be trend followers. The top five cities namely, Mumbai, Delhi, Chennai, Bangalore and Kolkata contribute 74 percent of the total funds mobilized. Therefore, among other things, the need is to increase the penetration ratio. One of the important goals of the mutual fund industry is to attract and mobilize major portion of the House Hold Savings in order to enable the small savers to benefit from the economic growth by facilitating them to part their savings into the assets which yield better their risk-adjusted returns.

Therefore, the question arises, has the Indian mutual industry succeeded in achieving this goal. The fact about it is that the Gross Domestic Saving (GDS) as a percentage of GDP has recorded significant growth and the HHS account for three quarter of the GDS. Although the mutual fund industry has succeeded in increasing its share from the GDS but the ratio of AUM to GDP is much lower than the developed countries of the world. They found that the rankings obtained by performing both the Sharpe and Treynor rules to be almost the same, implying that funds are well diversified. The rankings reveal that all analyzed funds outperformed the market on a risk-adjusted basis. However, the same is not true for mutual funds, for which there is no significant relationship. After
While looking at AUM composition by investor segment, corporate investments constitute nearly half of the AUMs, followed by high net worth investors. The retail segment account for just 20 percent of AUMs. As such, it can be inferred that the mutual funds have failed to penetrate deep into the retail segment. Retail investors in the country continue to prefer bank deposits and the real estate sector. The poor participation of the retail segment through mutual funds is reported due to very low levels of awareness in financial literacy, show capital market growth and the cultural and behavioral factors. The other important factor is the failure of the mutual fund industry to reach out to the nook and corner of the country.
Mutual fund financial investment instruments

The Mutual fund is one of the most attractive financial investment instruments that play a vital role in the economy of a country. Mutual fund Industry was introduced in India in the year 1963 with the formation of Unit Trust of India. Mutual funds are financial intermediaries in the investment business. A mutual fund is an investment company that creates a bridge between individual investors or retail investors and corporate giants. Mutual funds provide an investment options for retail investors or individual investors those who are not aware about stock market still they want to invest their funds in stock market with a small amount of money. A mutual fund is a pure intermediary which performs basic function of buying and selling of security on behalf of its investors or unit holders. Mutual funds mobilize saving from a large number of investors and invest these funds in share and other securities. During the last few years, many extraordinary and rapid changes have been seen in the Mutual fund industry. Therefore, due to the changed environment it becomes important to investigate the mutual fund performance. The need for evaluating the performance of mutual fund schemes in India is to see whether the mutual fund schemes are outperforming or underperforming than the benchmark and to see the competency of schemes to make out a strong case for investment. The present paper investigates the performance of select mutual fund schemes of UTI in India. The success of any scheme depends upon the competence of the management and its soundness.

Lower R2, or higher idiosyncratic risk relative to total risk, measures selectivity or active management. We show that lagged R2 has significant negative predictive coefficient in predicting alpha or Information Ratio. The effect of dispersion on returns is particularly pronounced among stocks with high information asymmetry, moreover, the lower returns on stocks with low dispersion concentrate on those with binding short-sale constraints. The results are consistent with a subgroup of informed managers driving up the dispersion in active holdings when they place large bets after receiving positive information signals unobserved by their peers; conversely, binding short-sale constraints prevent them from fully using their negative private information, leading to low dispersion in active holdings.

Further, the household sector which account for major position of the gross domestic savings have shown least preference for mutual funds, rather these have been find to prefer most deposits, both banking and non-banking. Though the mutual fund industry has recorded significant progress on all fronts yet it has not be able to utilize its potential fully. On almost on all parameters it is far behind the developed economics and even most of the emerging economics of the world. The industry is confronted with number of challenges like low penetration ratio, lack of product differentiation, lack of investor awareness and ability to communicate value to customers, lack of interest of retail investors towards mutual funds and evolving nature of the industry. Therefore, if the industry has to utilize its potential fully, it has to address these challenges. To address these challenges the need is to penetrate into the tier II & tier III cities which among other things would require to seek more awareness of the investors through strategic initiatives and investor education drives. Apart from this, the mutual fund industry has to continually deliver superior risk-adjusted returns to the investors. This would require the fund managers on the one hand to exhibit superior stock selectivity and market timing performance consistently and in the other hand to keep the fund costs under check. Delivering superior risk-adjusted returns consistently will automatic
Mutual Funds risk analysis

- The Franklin Templeton's mutual fund schemes performed very well in 2013-14 & 2016-17. The schemes didn't perform well in the year 2014-15 and 2017-18 where it gave negative returns. During 2015-16 all the schemes except Franklin Asian Equity fund didn't perform well. On an average the performance was good.

- Indiabulls mutual fund schemes performed very well during 2015-16. During 2013-14 and 2014-15 it performed quite well except for Indiabulls Bluechip Fund and Indiabulls short term fund-direct plan. The Indiabulls ultra short term fund didn't perform well along with the Indiabulls ultra short term fun-direct and Indiabulls short term fund-direct fund during 2016-17 and the performance was very bad during 2017-18. On an average the performance was good.

- UTI mutual fund schemes gave a noteworthy performance during 2013-14 and it gave a balanced performance during 2016-17. The funds gave a very bad performance during 2017-18. Except UTI Short Term Income-institutional Fund and UTI Liquid Fund-direct plan in 2014-15 all other schemes performed very badly and in 2015-16 except UTI Short Term Income-institutional Fund all other schemes performed very badly. On average these schemes didn't perform well.

- The SBI mutual fund schemes performed very well during 2013-14 and 2014-15 except SBI Contra Fund in the second year. The fund gave a quite good performance during 2016-17 except the SBI Savings fund and the banking & PSU fund. The fund gave a very bad performance during 2017-18. On an average these scheme performed quite well.

- The Axis mutual fund schemes performed well during 2013-14, except for the Gold fund and in 2015-16 except the bluechip fund other performed very well. During 2014-15 all the funds except the banking & PSU fund didn't performed well. All the schemes in 2016-17 except the bluechip fund didn't perform well. All the schemes underperformed during 2017-18. On an average these scheme performed quite well.

- The Franklin Templeton's beta value for the Asian Equity fund and Bluechip Fund is below 1 which means that they are less volatile than market but the latter is near 1 which indicates that the stock is said to be riskier in comparison to the market. The Build India fund's beta value has crossed 1 which indicates that they are 30% more volatile than the market.

- Indiabulls beta values for all the schemes are below 1 which means that they are less volatile than the market. For the bluechip fund the risk has crossed 1 in 2015-16 which represents that the stock is 11% more volatile than the market.

- UTI's beta value for short term income fund and liquid fund plan are below 1 which indicated that they are less volatile than the market. The core equity & transportation fund's beta value has crossed the benchmark which indicates that they are 35% more volatile than the market and they are said to be riskier in comparison to the market.

- SBI's beta value are below 1 for equity hybrid, savings and banking & PSU fund which means they are less risky. The bluechip and the contra fund has crossed the benchmark in 2016-17 & 2015-16 which indicates that they are 90% more volatile than the market and other values are almost near to the benchmark which indicates that the stock is said to be riskier in comparison to the market.

- Axis bank's beta values are below 1 for all years except for the bluechip fund (1.05) during 2013-14 which makes that fund more risky than the market. The gold scheme's beta value are in negative for all the years which represents that the stock returns moves in the opposite direction of the market return.

- The Treynor ratio indicates that the top performing schemes are the UTI-Core Equity Fund and almost all the schemes related to Axis mutual funds have the minimum risk. Indiabulls Short term Fund and UTI Short term fund are the poor performers. The Jenson ratio indicates that the top performing schemes are Franklin Asian Equity fund, Indiabulls Ultra
Short term fund, SBI Savings, Banking and PSU Debt funds and almost all the schemes of Axis Mutual Funds have minimum risk. Other schemes are performing quite well with moderate risks. ally create a niche for the mutual funds.

**Conclusion**

It can be safely concluded that on the whole the sample schemes during the period under reference have delivered higher returns than the market at a risk which was even less than the risk of market portfolio. Scheme-wise overwhelming majority of sample schemes i.e. 80 percent sample size have been found to have outperformed the market portfolio across all the performance measures viz. excess return, abnormal excess return and risk-adjusted return. Some small percentages of funds have also been found to have underperformed the market portfolio.

Mutual funds work on the basis of two maximums i.e. maximization returns and diversification of risk. To achieve these twin objectives, the fund managers are required to evolve efficient investment management practices which calls for a strategic allocation of the funds money to broad asset categories, to identify and select undervalued stocks for the portfolio and timing market movements (Market Timing skills). Therefore, the good or poor performance of the fund managers can be attributed either to the stock selection skills or to the market timing abilities of the fund managers. Owing to this fact, the performance of sample schemes as indicated above has been decomposed into two parts viz. the performance attributable to the stock selection ability and the market timing skills of the fund managers of schemes respectively. The detailed analysis of the stock selection skills and market timing abilities of fund managers of the sample schemes during the period under study has been made in paras that follows this discussion.

**References**

20. Marx makes no claim to have produced a master key to history. Historical materialism is not "an historico-philosophic theory of the marche generale imposed by fate upon every people,
21. Not found in search function at Draper Arkiv.
34. About the Section on Marxist Sociology Archived 2009-01-09 at the Wayback Machine
36. American criticism of orthodox Marxism and argument for a more radical version of historical materialism that sticks closer to Marx by changing itself to keep up with changes in the historical situation.