information, improved transparency in operation, better customer service and assured benefits of professionalism.

Yadav, R. A. and Mishra, Biswadeep (1996) evaluated 14 close end schemes over the period of April 1992 to March 1995 with BSE National Index as benchmark. Their analysis indicated that, 57 percent of sample schemes had a mean return higher than that of the market, higher Sharpe Index and lower Treynor index. Schemes performed well in terms of diversification and total variability of returns but failed to provide adequate risk-premium per unit of systematic risk. 57 percent had positive alpha signifying superior performance in terms of timing ability of fund managers. Fund managers of growth schemes adopted a conservative investment policy and maintained a low portfolio beta to restrict losses in a rapidly falling stock market.

Jayadev, M. (1996) studied the performance of UTI Mastergain 1991 and SBI Magnum Express from 1992-94 with 13 percent return offered by Post Office Monthly Income Deposits as risk-free return. Mastergain earned an average return of 2.89 percent as against market earnings of 2.84 percent. Volatility of Magnum Express was high compared to Mastergain. Master gain had a superior performance over its benchmark (Economic Times Ordinary Share Price Index) by taking greater risk than the market. Mastergain indicated lesser degree of diversification of the portfolio with lower R2 value and very high unique risk. Magnum Express portfolio was well diversified with higher R2 value along with lower unique risk and total risk. Both the funds did not earn superior returns because of lack of selectivity on the part of the fund managers indicating that, the funds did not offer the advantages of professionalism to the investors.

Panigrahi (1996) in his study of Indian mutual funds selected a sample of four growth funds for the time period October 1993 to December 1995 and divided them into two periods to capture their performance in boom and bear phases separately. The general conclusion reached was that funds had

lesser risk than the market index, BSE 200 or the RBI ordinary share price index and they delivered near market returns under normal conditions. He used a log-log model regressing the log of (monthly average) of NAV on the log of the market index (monthly tune rates of growth) to arrive at the R2 or diversification and risk compared to the market. The study of course, has a very limited objective, sample and time period.

Sahadevan, S. and Thiripalraju, M. (1997) stated that, mutual funds provided opportunity for the middle and lower income groups to acquire shares. The savings of household sector constituted more than 75 percent of the GDS along with a shift in the preference from physical assets to financial assets and also identified that, savings pattern of households shifted from bank deposits to shares, debentures, and mutual funds.

Krishnamurth, S. (1997) identified mutual funds as an ideal investment vehicle for small and medium investors with limited resources, to reap the benefits of investing in blue chip shares through firm allotment in primary market, avoid dud shares, access to price sensitive information and spread risk along with the benefits of professional fund management.

Sahadevan and Thiripalraju (1997) attempted to compare the performance of funds using total return, consistency and volatility. They did not attempt to use any CAPM single or multifactor models. Their study covered private and public sector mutual funds for the period 1995-96. The benchmark used was the SSE National Index terms of absolute returns. Out of 32 public sector funds, 11 outperformed the index. In the case of private sector mutual funds time out of the ten studied outperformed the index. The study of course did not intend to go into deeper risk return analysis and compared a host of different types of funds to a Single index.

Gupta and Sehgal (1998) evaluated performance of 80 mutual fund schemes over four years (1992-96). The study tested the proposition relating to fund diversification, consistency of performance, parameter of performance and risk-return relationship. The study noticed the existence of

inadequate portfolio diversification and consistency in

performance among the sample schemes.

Rao, Mohana P. (1998) opined that, UTI followed by LIC Mutual Fund dominated the market with 54 and 15 schemes respectively. His interview with 120 respondents showed that, 96 percent invested in UTI due to better service and return. 50 percent of shareholding and 25 percent of unit-holding respondents were from metro cities. Investor's services, income-cum-growth option and capital appreciation were very important aspects while choosing a fund. He identified that the close-end schemes were very popular among investors and respondents in general expected private sector funds to improve the quality of services, investors' confidence besides reducing fraud and mismanagement.

Irissappane, Aravazhi (2000) evaluated the investment pattern and performance of 34 close-ended schemes from 1988-98 and elicited the views of investors and managers belonging to Chennai, Mumbai, Pune and Delhi. The survey identified that the investors desired a return equivalent to market. 16 schemes reported greater risk than the market volatility. Majority of the schemes had a lower beta. Negative values in the case of Treynor and Sharpe index among many schemes indicated the mockery of the market. He further identified that the fund managers of 26 schemes had missed the chance of gaining from scheduling with response to

changes in the market.

Gupta, Amitabh (2000) identified that the IMFI had come a long way since its inception in 1964. The transformation in the previous decade was the outcome of policy initiatives taken by the Government of India to break the monolithic structure of the industry in 1987 by permitting public sector banks and insurance sectors to enter the market.

Sehgal, Sanjay and Gupta, O. P. (2000) evaluated the investment performance of 80 schemes managed by 25 mutual funds for Indian market over a period of 1992-96. Of the 80 schemes, 54 were close-ended and 26 were open-ended. Out of

80 schemes, there were 50 growth schemes, 17 income schemes and 13 income growth schemes. The objectives of the study were to test the other propositions related to: (i) fund diversification, (ii) consistency of performance, (iii) fund objectives and risk measurement, and (iv) general risk-growth relationship for the Indian capital market. The sample consisted of mutual fund schemes of 25 mutual funds.

To ensure a meaningful evaluation, the performance of the sample schemes were compared with types of benchmark portfolio viz. (i) Market index, (ii) Fundex, and (iii) Personal benchmark portfolio.

For study they used:

Rate of growth approach.

Sharpe's reward to variability ratio.

Treyner's reward to volatility ratio.

Estimation of Beta to measure the performance of mutual fund schemes.

Conclusion of the research was, the funds were unable to exhibit it consistent performance over time. At best, they demonstrate continuous extra-normal performance for a couple of years, but they fail to sustain the performance over longer periods. However, the results should be interpreted in the lights of the fact that a continuous record was not available for many sample funds.

Agrawal, Ashok Motilal (2000) opined that mutual funds had made a remarkable progress during 1987-95. The cumulative investible funds of the mutual funds industry recorded a skyrocketing growth since 1987 and reached ₹ 8,059 crore by December 31, 1995 from ₹ 4,564 crore during 1986-87.

Rao, K.V. and K. Vankateshwarlu (2000) conducted a case study of Unit Trust of India in regard to market timing abilities of Fund Managers. The purpose of study was the evaluation of market timing ability of UTI fund managers for all the listed schemes of UTI under the closed-end category.

The methodology used for measuring the market timing

basically relies upon the beta coefficient. The study revealed that two out of nine schemes studied i.e. Mastershare and Grandmaster showed significant rate of change value at 5 percent. But the rate of change value of Grandmaster was negative -0.5. Similarly, there was negative rate of change regarding UGS-2000, UGS-5000, and Mastergrowth. Other schemes showed positive rate of change. So it is clear that fund mangers of listed schemes of UTI were less concerned about forecasting the market and making the necessary adjustment in

the portfolio they manage.

Ramesh Chander (2000) examined 34 mutual schemes with reference to the three fund characteristics with 91-days treasury bills rated as risk-free investment from January 1994 to December 1997. Returns based on NAV of many sample schemes were superior and highly volatile compared to BSE SENSEX. Open-end schemes outperformed close-end schemes in term of return. Income funds outsmarted growth and balanced funds. Banks and UTI sponsored schemes performed fairly well in relation to sponsorship. Average annual return of sample schemes was 7.34 percent due to diversification and 4.1 percent due to stock selectivity. The study revealed the poor market timing ability of mutual fund investment. The researcher also identified that, 12 factors explained majority of total variance in portfolio management practices.

Gupta, Amitabh (2001) evaluated the performance of 73 selected schemes with different investment objectives, both from the public and private sector using Market Index and Fundex. NAV of both close-end and open-end schemes from April 1994 to March 1999 were tested. The sample schemes were not adequately diversified, risk and return of schemes were not in conformity with their objectives, and there was no evidence of market timing abilities of mutual fund industry in

India.

Narasimhan, M. S. and Vijayalakshmi, S. (2001) analysed the top holding of 76 mutual fund schemes from January 1998

to March 1999. The study showed that, 62 stocks were held in portfolio of several schemes, of which only 26 companies provided positive gains. The top holdings represented more than 90 percent of the total corpus in the case of 11 funds. The top holdings showed higher risk levels compared to the return. The correlation between portfolio stocks and diversification benefits was significant at one percent level for 30 pairs and at five percent level for 53 pairs.

Roshni, Jayam's (2002) study brought out those equities had a good chance of appreciation in future. The researcher was of the view that, investors should correctly judge their investment objective and risk appetite before picking schemes, diversified equity funds were typically safer than others and index funds were the best when market movements were not certain. The researcher suggested Systematic Withdrawal Plan (SWP) with growth option was more suitable for investors in need of regular cash inflows.

Bansal, Manish (2003) survey of 2,819 respondents revealed that, the percentage of investors holding only UTI schemes reduced. The unit holders' loyalty seemed to have become a myth as investors were looking for performance. Unit-holders spread their holdings over two or more funds with an urge to diversify increasing competitive mutual fund environment.

Roy and Deb (2003), used the conditional performance evaluation technique to study fund timing and performance. They pointed out that the tradition models of Treynor-Mazuy had shortcomings as they based their assessment on historical average returns without considering the role of new information and the time varying element of returns. Taking a sample of 89 funds (consisting of equity diversified and balanced funds) they test for alpha over the time period January 1999 to July 2003. Using lagged information variables they find that the alpha deteriorates. But their study is weak with poor statistical significance. Indian empirical studies tend to focus on the application of evolving methods to the study of

mutual fund performance. However, to the best of our knowledge, there have been no studies that tried to deal with the interplay between regulations and fund behaviour. Issue such as the influence of regulations on performance and its ability to act as a genuine constraint on expenses are left untouched. This study makes an attempt to fill this gap.

Kshama, Fernandes (2003) tried to measure and understand the tracking error of index funds in India. Specific study was done on the implementation of index fund, assuming that an investor is interested in utilising an index fund. The difficulty faced was that of tracking error. i.e. the annualised standard deviation of the error between index fund growth and index growth. The study tried to explore the relationship between index volatility and index fund tracking error. As the study was related to measuring and understanding the tracking error of index fund, researcher addressed the following questions.

- What are the difficulties faced in measuring the tracking error and how it can be overcome?
- What is the overall experience with tracking error of the competing index fund products in India today?
- 3. Can we decipher the source of tracking error? Is tracking error due to buffer cash maintained or due to active management at the fund?

The study finds that the tracking error for ides funds in India ranges from 0.68 percent to 10.97 percent. The Templeton Franklin funds seem to be the best of the lot. consistently maintaining low tracking errors. The UTI Nifty Index Fund has fared during the first half of its life, but has Index rund has the UTI Nifty Index Fund has fared very reduced since. The UTI Nifty Index Fund has fared very reduced since. The control index pund has fared very poorly on replication index performance, exhibiting

Singh, Jaspal and Subhash Chander (2003) identified that significantly high tracking error. Singn, Jaspar and Sasmash Chander (2003) identified that past record and growth prospects influenced the choice of Investors in mutual funds expected reputed. past record and grown prospects influenced the choice of scheme. Investors in mutual funds expected repurchase information. Returned that

cheme. Investors in manual runus expected repurchase prompt service and adequate information. Return,