CHAPTER 6

FINDINGS OF THE STUDY

This chapter delivers the main findings of the study as below:

Findings for objective 1: To study the performance of mutual funds in India.

Study of the performance of mutual funds in terms of efficiency through input oriented Data Envelopment Analysis (DEA) model during the period 01 April, 2006 to 31 March, 2012 has revealed that out of the total sample of 119 open ended mutual fund schemes, 31 (26 percent) have performed efficiently and 88 (74 percent) have performed inefficiently. However, when the DEA was run on 48 Equity oriented mutual fund schemes in DEA Run 2, 26 (54 percent) of the schemes were found to be efficient and 22 (46 percent) were found to be inefficient. In DEA Run 3, among 30 Income mutual fund schemes, 16 (53 percent) were found to be efficient and 14 (47 percent) were inefficient schemes. The DEA Run 4 was employed for 23 Balanced mutual fund schemes and it was found that 15 schemes (65 percent) came out to be efficient and the rest 8 (35 percent) were inefficient. In DEA Run 5, which was employed on 18 ELSS mutual fund schemes; it was found that 100 percent of ELSS mutual fund schemes came out to be efficient. Out of these 18 schemes 16 were efficient in DEA Run 1 also. Thus comparing the different schemes, it was found that ELSS are the most efficient schemes among the Equity, Income, Balanced and ELSS schemes.

DEA compares individual schemes to the best performer schemes. Therefore, this technique goes beyond being just a performance measure and it indicates the ways in which inefficient schemes may achieve efficiency. From DEA analysis, the researcher has identified an efficient peer group and a set of target inputs or virtual inputs to be followed by each inefficient scheme, in order to achieve efficiency. In addition to the virtual or target inputs, reduction required in original value of each input i.e., load fee (LOAD), expense ratio (EXPENSE), risk (RISK β) and minimum initial investment (MINII) for the entire inefficient mutual fund scheme has also been obtained. It has been found that the major cause of inefficient performance of mutual fund schemes is the load fee charged by the companies. Expense ratio and risk involved in terms of beta also cause inefficiency. However, minimum
initial investment is not found to be significant for inefficient performance of mutual fund schemes and is the least important cause for the same.

**Findings for objective 2:** To study the performance of mutual funds with respect to different performance attributes.

Analysis of performance of mutual funds and its attributes revealed that their age (LAGE), asset ratio (ASSETR) and past performance (LSHARPE) do have a significant effect on their efficiency whereas, the attributes as asset size (ASSETS) and risk (RISK) do not effect efficiency significantly. Moreover, age of the mutual fund scheme and its asset ratio is negatively related to their efficiency and hence by an increase in these two attributes, scheme is less likely to be efficient. However, past performance of the schemes is positively related to their efficiency score implying the schemes which were efficient in previous year are more likely to be efficient in the next year.

**Findings for objective 3:** To develop a framework for performance measure of mutual funds in India.

As per the analysis of performance of mutual funds in terms of efficiency and relationship between its attributes and performance, a framework for performance measure of mutual funds has been developed. The framework reveals that mutual fund attributes as its age, asset ratio and past performance do have a significant impact on their performance in terms of efficiency. Also, load fee, expense ratio and minimum initial investment are related to the performance of mutual funds and should be decreased for improving the performance.

**Figure 6.1:** Frameworks for Performance Analysis of Mutual Funds

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P = 3.582 - 1.284 \text{LAGE} - 1.607 \text{ASSETR} + 3.039 \text{LSHARPE}
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**Findings for objective 4:** To study the behaviour of Indian individual investors towards the investment of their savings.

In the analysis of the investors’ behaviour towards the investment of their savings, it has been found that maximum number of investors have been investing in Fixed Deposits followed by Real Estate, Mutual Funds, Gold/e-gold and PO/NSC. In Public Provident Funds, Shares, Bonds and Insurance, lesser number of investors do invest. Top five investment avenues in which maximum amount of investment have been done are Real Estate, Gold/e-gold, Fixed Deposits, Shares and Mutual Funds in that order. However, in future investors would like to invest more in Shares followed by Real estate, Gold/e-gold, Mutual Funds and Public Provident Fund. After considering all three factors as number of investors investing in a particular option, the amount of investment and the preferred investment option for the future, researcher has found that real estate is the most popular investment option. Regarding the Mutual Funds it has been found that the numbers of investors are more but the amount of investment is not that high. It indicates that less number of investors invests in Mutual Funds and even if they invest, they invest small amounts. Overall Mutual Funds stand at third rank, Real Estate and Gold being the first and second option.

Investors perceive Shares as the most return giving investment option followed by Real Estate, Gold/e-gold, Mutual Funds and Bonds. Risk involved in the investment of shares has also been professed as highest followed by Mutual Funds, Real Estate, Insurance and Bonds. Liquidity of the Mutual Funds has been perceived as highest. Shares, Fixed Deposits, Bonds, PO/NSC and Public Provident Fund also possess high liquidity as per the investors. They also consider Insurance as the highest tax saving option followed by Fixed Deposits, Public Provident Fund, Real Estate, PO/NSC, Bonds and Mutual Funds. Investors possess maximum procedural understanding of Public Provident Fund followed by Fixed Deposits, PO/NSC, Gold/e-gold and Bonds. Thus it could be inferred that as per investors perception Mutual Funds are highly liquid, high risk, low return and difficult to understand investment option and also they provide no tax benefit. This perception of investors explains the reason behind low investment in mutual funds in India.

Investors also consider some investment options similar on five parameters as return, risk, liquidity, tax savings and procedural understanding. These investment options lying similar on some parameter form the homogenous subset (HS) for that parameter. The researcher has found that in case of return, investors perceive that Shares and Real Estate give
equally high return. The returns from Gold/e-gold and Mutual Funds have been perceived similar. Bonds and Public Provident Fund have been considered as same return giving avenues. PO/NSC and Fixed Deposits have been recognised as similar return generating options. Also, most of the investors do not consider Insurance as an investment option and therefore, it comprise the fifth HS and is considered distinct from all the rest investment avenues on return parameter.

Investors consider that the risk associated with Shares is highest and distinct from all other investment options. Similarly, Mutual Funds have also been considered highly risky and distinctive on this parameter. Risk associated with the investment in Real Estate and Insurance has been considered almost similar. Bonds and Gold/e-gold have not been considered much risky. Also, investors perceive that the risk involved in the investment of Public Provident Fund, PO/NSC and Fixed Deposits is almost similar and lowest.

Mutual funds, Fixed Deposits and Shares have been considered as almost equally liquid investment options with liquidity as quite high. Liquidity of Bonds and PO/NSC has also been perceived as almost similar and lesser than Mutual Funds. Public Provident Fund, Gold/e-gold and Insurance have also been considered less liquid. However liquidity of Real Estate as an investment options has been considered lowest and distinctive from all other investment options.

Investors consider that the tax saving from Insurance is high and different from all other investment options. Also, the tax saving from Fixed Deposits, Real Estate, Public Provident Fund and PO/NSC is perceived as almost similar. Mutual Funds and Bonds have been considered less tax saving options. Shares have been considered lowest tax saving investment option and distinctive from all other investment avenues on this parameter.

Investors possess maximum and almost similar procedural understanding for Public Provident Fund and Fixed Deposits. Procedural understanding for PO/NSC is also high and distinctive from all other investment options. Gold/e-gold and Bonds are same on this parameter. Investors have the procedural understanding of investing in Insurance, Real Estate and Mutual Funds almost similar. However, Shares as an investment avenue score high on procedural understanding parameter.
Findings of objective 5: To study the perception of Indian individual investors towards the investment in mutual funds.

Maximum numbers of investors are investing in Growth schemes followed by Income, Balanced, Sector funds, ELSS, Gold ETF and Index funds (Annexure J).

Investors judge Mutual Funds on the basis of their several characteristics. Characteristic that influence investors’ decision the most are reputation of the Mutual Fund company, rating given by magazines or research agencies, past performance of the funds, load status and portfolio of the scheme. Availability of tax benefits, asset size of mutual funds and their current NAV also influence the investment decision. However, characteristics as it is an Indian or foreign fund, their turnover and its manager have a little impact on investment decision.

Based upon the characteristics, five major factors influencing the investment decision for Mutual Funds are their Structure (comprising of portfolio, exit load & Mutual Fund is Indian or foreign), Size (including its turnover & asset size), Performance (i.e., its past performance, current NAV & rating), Outlook/Status (comprising of past performance, tax benefits & Mutual Fund is Indian or foreign) and Professional Expertise (i.e., its reputation & Mutual Fund’s manager). Exit load and past performance are found to be important factors that influence the investment decision as investors have to pay exit load charges. High exit load charges reduce the net returns to investor. So, investors prefer funds with low or nil exit load charges. It is also found that investors judge future performance of the mutual fund scheme on the basis of its past performance because of investors’ assumption that the past performance will continue in future as well. Exit load and past performance are also found to be factors responsible for inefficient performance of mutual funds in the secondary data study. It is further found that investors judge mutual funds on the basis of their asset size and this factor is found to be negatively related to the efficiency performance of the mutual fund schemes in the secondary data study. Investors also look for the tax benefits before investing in mutual funds as most of the investors are tax payers and investment in ELSS schemes make them eligible for tax reduction under section 80C of Income Tax Act 1962 and beside this government has also announced that the first time investors in the capital market will be eligible for a deduction of Rs 50,000 under section 80CCG of Income Tax Act 1962 and the
same is applicable for mutual fund investments too. The researcher has further found from the empirical analysis that Equity Linked Saving Schemes which provide tax benefit to the investors are most efficient mutual fund schemes among all investment styles. Since individual investors don’t have proper knowledge about each of the available security and it is very difficult for them to devote their full time in tracking the performance of these securities and managing their portfolio thus they require an expert for the same. Thus, another important factor that investors look is the professional expertise of any mutual fund scheme which is reflected by the expertise of mutual fund manager.

Management cost charged by the Mutual Fund companies is the major cause that stops investors from investing in Mutual Funds. While discussing performance of Mutual Funds in terms of efficiency, we have found that their efficiency can be increased by decreasing their load fee and expense ratio. Second important cause for the non investment in Mutual Funds is less return.

It has been explored that strong grievance mechanism and strong regulations might turn Non Mutual Fund Investors (NMFI) into Mutual Fund investors (MFI). Expert advice might also help towards enhancing the investment in these. However, information about government regulations and training programme would not be of much help in motivating NMFI towards investment in Mutual Funds.