Chapter 6

Findings, Conclusions and Suggestions
6.01 Introduction

Mutual funds are one of the important means of deploying the savings of household investors. Mutual Funds supplement the financial system in its efficiency by providing a wide range of investment alternatives with an array of risk return characteristics. The range includes low risk – return products which invest into debt securities to high risk –return products which invest into equity securities. Traditionally, the Indian household sector savings is skewed towards debt investments mainly constituted by bank deposits. The householder’s interest towards equity instruments has been quite low. As equity capital is essential for industrial development and in turn the nation’s economic growth, a number of measures have been taken by the Government from time to time, to induce household investors to invest into equity markets. One such measure was the launch of Equity Linked Savings Scheme (ELSS) mutual funds.

Investments into equity market could be made directly by investing into equity shares of companies or indirectly by investing through mutual funds. Investments through mutual funds provide the investor with an added advantage of instant diversification of the portfolio which is difficult to achieve for a small investor through direct investments. In order to provide this diversification benefit to the small investor and at the same time, to channelize a part of householder’s savings into equity markets, the ELSS funds were introduced in the year 1991. ELSS funds are a type of equity mutual funds, which provide an incentive to the investor in the form of reduced Income Tax obligation, depending upon the investment made into the fund during the year, subject to certain limits. In other words, ELSS funds are a type of tax saving investments.

There are number of other investments too, which provide similar tax benefit to the investor, as provided by ELSS for the amount invested. In the spectrum of tax saving investments, ELSS stands at one extreme with highest amount of variability in returns to the investor, as compared to some which have a very low variability or some others with no variability in returns. That being the case, investor’s preference towards ELSS funds, purely depends upon the investment performance of ELSS funds and the perception that investors hold towards this investment. Therefore this study had this twin objective of
analysing the investment performance of ELSS funds and investor perception and preference towards ELSS funds.

6.02 Findings

The findings of the study as against the objectives set forth for the study is provided below.

Related to Objective 1

- The average of quarterly returns of ELSS funds was 3.29 percentage as against 5.66 percentage of Diversified Equity funds.
- Only 34 percentage of the ELSS funds could outperform the Diversified Equity funds category quarterly average returns.
- On absolute return basis, ELSS funds have underperformed the Diversified Equity funds category by 1.31 percentage per quarter.
- The returns earned by an investor through a quarterly SIP investment over 13 years in ELSS funds on an average, would have been 12.65 percentage pa, as against 21.30 percentage in case of Diversified Equity funds.
- The rolling 3 year CAGR for ELSS funds showed a highest return of 59.61 percentage pa for the period 2003-06 and lowest of -17.99 percentage for the period 2000-03. The same for Diversified Equity funds was 77.17 percentage and -7.24 percentage.
- The quarterly average of Standard Deviation of ELSS funds was 10.92 percentage as against 12.02 percentage for Diversified Equity funds.
- 56 percentage of the ELSS funds have undertaken a lesser standard deviation as compared to the average of Diversified Equity funds.
- In absolute terms, ELSS funds have on an average undertaken 0.56 percentage lower risk per quarter as compared to Diversified Equity funds.
- The quarterly CV of ELSS funds was 10.38 as against -6.16 for Diversified Equity funds.
- The quarterly average Sharpe ratio of ELSS funds for the period was -0.03 as against 0.18 for Diversified Equity funds.
- Only 39 percentage of the ELSS funds could outperform the quarterly Sharpe ratio of Diversified Equity funds category average.
On absolute terms, ELSS funds have underperformed Diversified Equity funds to the extent of 0.10 in terms of quarterly average Sharpe ratio.

The Sortino ratio of ELSS funds based on quarterly average returns was -0.03 for ELSS funds as against 0.26 for Diversified Equity funds.

Only 36 percentage of the ELSS funds could outperform the Diversified Equity funds category quarterly average Sortino ratio.

In absolute terms, ELSS funds have underperformed the Diversified Equity funds, to the extent of 0.15 in terms of quarterly average Sortino ratio.

The average Beta of ELSS funds based on BSE Sensex, BSE 100 Index, BSE 200 Index, BSE 500 Index is 1.05, 0.98, 0.95 and 0.92 respectively, as against 1.11, 1.04, 1.01 and 0.98 for Diversified Equity funds.

The average Beta of ELSS funds based on NSE Nifty, NSE CNX 100 and NSE CNX 500 is 1.03, 0.99 and 0.94 respectively as against 1.10, 1.06 and 1.00 for Diversified Equity funds.

The R Squared of ELSS funds based on BSE Sensex, BSE 100, BSE 200 and BSE 500 were 0.90, 0.93, 0.93 and 0.93 as against 0.91, 0.95, 0.95 and 0.96 for Diversified Equity funds.

The R Squared of ELSS funds based on NSE Nifty, NSE CNX 100 and NSE CNX 500 is 0.91, 0.93 and 0.93 respectively as against 0.91, 0.95 and 0.96 for Diversified Equity funds.

The quarterly average of Treynor’s ratio for ELSS funds based on BSE Sensex, BSE 100, BSE 200 and BSE 500 is -0.0214, -0.0108, -0.0378 and -0.0185 respectively, as against 0.0296, -0.0035, 0.0353 and 0.0366 for Diversified Equity funds.

The quarterly average of Treynor’s ratio for ELSS funds based on NSE Nifty, NSE 100 and NSE 500 is 0.0109, 0.0212 and 0.0089 respectively as against 0.0247, 0.0348 and 0.0327 for Diversified Equity funds.

The quarterly average of Jensen’s Alpha for ELSS funds based on BSE Sensex, BSE 100, BSE 200 and BSE 500 is 0.17, 0.36, 0.39 and 0.44 respectively, as against 0.94, 1.11, 1.29 and 1.32 for Diversified Equity funds.

The quarterly average of Jensen’s Alpha for ELSS funds based on NSE Nifty, NSE CNX 100 and NSE CNX is -0.20, -0.12 and 0.36 respectively, as against 0.71, 0.73 and 1.20 for Diversified Equity funds.
74 percentage of the ELSS funds underperformed the Jensen’s alpha of Diversified Equity funds category average based on BSE Sensex.

71 percentage of the ELSS funds underperformed the Jensen’s alpha of Diversified Equity funds category average based on NSE Nifty.

The null hypothesis of no difference in the risk adjusted performance of ELSS funds based on Sharpe, Sortino and Jensen measures as against Diversified Equity funds was tested using Welch’s t – test and the p value was found significant at alpha equal to .05 and the null hypotheses is rejected.

Related to Objective 2

• The average of quarterly returns of ELSS funds was 3.29 percentage as against 3.90 percentage for Market Indexes.

• 55 percentage of the ELSS funds could outperform the Market Indexes category quarterly average returns.

• On absolute return basis, ELSS funds have underperformed the Market Indexes category by 0.02 percentage per quarter.

• The returns earned by an investor through a quarterly SIP investment over 13 years in ELSS funds on an average, would have been 12.65 percentage pa, as against 13.51 percentage in case of Market Indexes.

• The rolling 3 year CAGR for ELSS funds showed a highest return of 59.61 percentage pa, for the period 2003-06 and lowest of -17.99 percentage for the period 2000-03. The same for Market Indexes was 56.52 percentage and -17.27 percentage.

• The quarterly average of Standard Deviation of ELSS funds was 10.92 percentage as against 11.25 percentage for Market Indexes.

• 44 percentage of the ELSS funds have undertaken a lesser standard deviation as compared to the average of Market Indexes.

• In absolute terms, ELSS funds have on an average undertaken 0.07 percentage lower risk per quarter as compared to Market Indexes.

• The quarterly CV of ELSS funds was 10.38 as against -0.31 for Market Indexes.

• The quarterly average Sharpe ratio of ELSS funds for the period was -0.03 as against 0.07 for Market Indexes.
• 55 percentage of the ELSS funds could outperform the quarterly Sharpe ratio of Market Indexes category average.
• On absolute terms, ELSS funds underperformed by 0.01 in terms of quarterly average Sharpe ratio as compared to Market Indexes.
• The Sortino ratio of ELSS funds based on quarterly average returns was -0.03 for ELSS funds as against 0.06 for Market Indexes.
• 53 percentage of the ELSS funds could outperform the Market Indexes category quarterly average Sortino ratio.
• In absolute terms, ELSS funds have underperformed the Market Indexes, to the extent of 0.01 in terms of quarterly Sortino ratio.
• The null hypothesis of no difference in the risk adjusted performance of ELSS funds based on Sharpe and Sortino measures as against Benchmark Market Indexes was tested using Welch’s t – test and the p value was not found significant at alpha equal to .05 and the null hypotheses is retained.

Related to Objective 3

• The funds allocation to equity assets of ELSS funds for the years March 2009, March 2010, March 2011, March 2012 and March 2013 is 80.55 percentage, 93.23 percentage, 92.24 percentage, 93.47 percentage, 93.51 percentage and 90.60 percentage respectively as against 81.47 percentage, 92.44 percentage, 91.18 percentage, 90.79 percentage, 92 percentage and 89.58 percentage for Diversified Equity funds.

• The funds expense ratio for ELSS funds for the year ended March 2008, Mach 2009, March 2010, March 2011, March 2012 and March 2013 was 2.26, 2.32, 2.24, 2.25, 2.28, 2.46 and 2.31 percentage respectively, as against 2.02, 2.06, 1.92, 1.90, 1.84, 2.05 and 1.97 percentage for Diversified Equity funds.

• The average portfolio turnover ratio of ELSS funds for the Years 2010-11, 2011-12 and 2012-13 was 1.11, 0.92 and 0.86 respectively as against 1.01, 1.05 and 0.85 for Diversified Equity funds.
• The findings relating to investment performance are broadly in line with Kaur (2012), Bahl & Rani (2012), and Santhi & Gurunathan (2012).

**Related to Objective 4**

• Investor’s assigned the highest importance to expected returns of the investment. 41.9 percentage of the investor category and 44.5 percentage of the non-investor category have ranked returns of the investment as the most important attribute of an investment.

• Investor’s assign medium importance to the risk of the investment. 7.5 percentage of non-investors gave the highest importance to risk and 24 percentage of them gave it the least importance. Similarly 7.1 percentage of the investor category ranked it to be most important and 10.2 percentage gave it the least importance.

• The null hypothesis of investors perception towards risk in ELSS funds being equal to Diversified Equity funds was tested at a significance level of .05 using Mann Whitney U Test. The p value was found significant leading to the rejection of the null hypothesis. The mean ranks of the test showed that investors perceived lesser risk in ELSS funds as compared to Diversified Equity funds.

• The null hypothesis of investors expectation of average annual returns from ELSS funds being equal to Diversified Equity funds was tested at a significance level of .05 using Kolmogorov-Smirnov Test and the p value was found not significant. The null hypothesis is retained. This means that investor’s expectation of returns from ELSS funds is the same as the expectation of Diversified Equity funds.

• The findings with regard to investor perception are in line with the findings of Santhi & Gurunathan (2011), Murugan (2012), Vyas(2012), Agarwal & Jain (2013).
Related to Objective 5

- The respondents (24.7 percentage) in the non-investor category have preference for Bank FD as an investment product, closely followed by mutual funds (24 percentage). With regard to investor category, 27.2 percentage of the investors preferred Bank FD followed by 26.2 percentage for mutual funds.

- The respondents (31 percentage) in the non-investor category have preference for EPF as tax saving investment followed by 5 Year Bank FD (19.3 percentage). 39.3 percentage of this category have shown the least interest in ELSS funds.

- The preference of non-investor category and investor category towards mutual funds and ELSS funds as investment alternatives, was tested based on demographic factors of the respondents using Mann-Whitney U Test and Kruskal-Wallis Test. The null hypotheses being that the investors have the same preference for Mutual Funds and ELSS funds. In case of demographic factors like gender, age, educational qualification and occupation, the p value was significant at a level of .05 and therefore the null hypotheses were rejected. However in case of marital status and monthly average savings, the p value was not significant and therefore the null hypotheses was retained. The tests showed that males had more preference for mutual funds than females. Mutual funds were more favoured investment choice of younger population. Similarly the acceptability of mutual funds was high with post graduates and graduates. On the same lines those employed in private sector and those in business, had a higher preference for mutual funds.

- The preference for mutual funds as an investment product was tested between investor and non-investor categories using Kolmogorov-Smirnov Test. The null hypothesis being that there is no difference in the preference towards mutual funds between investor and non-investor category. The p value at a significance level of .05 was found insignificant and therefore the null hypothesis is retained. This showed that both types of respondents had the same preference for mutual funds.
• The preference of non-investor category towards tax saving investments was tested using Friedman’s Test. The null hypothesis being that investors have the same preference towards ELSS funds as compared to other tax saving schemes. The test showed a significant p value at a significance level of .05 and therefore the null hypothesis is rejected. The test showed that respondent’s preferences were not the same. They had a highest preference for 5 Year Bank FD and least preference for ELSS funds.

• The preference of investor category towards tax saving investments was tested using one sample Chi Square test as well as Friedman Test. The null hypothesis being that investors have the same preference towards ELSS funds as compared to other tax saving investments. Both the tests showed a significant p value at a level of .05 leading to the rejection of the null hypothesis. As per the mean rank, it can be stated that investors have a higher preference for 5 year Bank FD, followed by Life Insurance plans, National Pension Scheme and then ELSS funds.

6.03 Conclusions

Investor’s perspective

• The results of the study show that ELSS funds as a category have clearly underperformed the Diversified Equity funds on a risk adjusted basis. This indicates that ELSS funds provided lesser risk premium for a unit of risk undertaken, be it total risk, downside risk or market risk as compared to Diversified Equity funds.

• The study has found that the performance of ELSS funds as a category was significantly on par with market indexes on a risk adjusted basis. This means that ELSS funds provided a similar risk premium per unit of risk undertaken in terms of total risk and downside risk as compared to Market Indexes.
• The additional risks involved with ELSS investment as compared to Diversified Equity funds, can be viewed in terms of allocation of funds to equity. The study had found that ELSS over time had a marginally higher allocation to equity as compared to Diversified Equity funds. However the difference is not substantial and therefore does not pose any additional risk to the investor in terms of total risk undertaken.

• The additional risk involved with ELSS investment as compared to Diversified Equity funds, could also arise due to higher portfolio turnover ratio. The study has found that the average turnover ratio of ELSS funds and Diversified Equity funds as a category is not different and therefore does not pose any additional risk to the investor.

• Additional risk to an investor could stem from higher expense ratio charged by the fund. The study reveals that the average fund expense ratio of ELSS category has been consistently higher than Diversified Equity funds category. This poses an additional risk to the investor as his returns from the fund, gets lowered to the extent of additional fund expenses charged.

**Asset Management Company Perspective**

• The study has found that the awareness of ELSS funds as a tax saving investment option is not high. Although investors are aware of mutual funds and have shown preference for investing into it, a good section of the investors are not aware of the ELSS category of mutual funds.

• The study found that most investors perceive ELSS funds as average risk – return product. The perception of it being a high risk – return product exists, but comparatively to a lesser extent.

• The non-investors in ELSS have shown least preference for investing into ELSS funds as compared to other tax saving schemes. However investors of ELSS, although do not assign the highest preference, however have assigned a medium preference towards it.
• The study clearly shows that investors do not perceive a higher risk investing into ELSS funds as compared to Diversified Equity funds. Investors perceived a lesser a risk investing into ELSS funds.

• The study shows that investors to a great extent are satisfied with the return performance of ELSS funds.

• Investors focus on returns performance and tax benefit while investing into ELSS funds. Asset Management Company and Fund Manager are other factors that influence their selection of a particular fund, followed by star ratings of the fund.

**Government and Regulations perspective**

• The study shows that the 3 year rolling returns of ELSS funds has been positive for most of the periods with huge volatility in the returns earned. The returns earned for this period is purely dependent upon the market conditions. A good number of investors are happy with the existing lock in period of 3 years and also willing to remain invested into equity for a period of up to 5 years.

• In reality, the distinction between ELSS funds and Diversified Equity funds does not exist. This is clear from the equity allocation pattern, where both ELSS and Diversified Equity funds invested a similar portion of the AUM into equity securities. Investors perceive a higher risk from Diversified Equity funds rather than from ELSS funds.
6.04 Suggestions

Investors

- Investors irrespective of their demographic profiles, in order to have asset allocation across asset classes and to enhance the returns of their portfolio, need to invest a part of their tax saving investment into ELSS funds.

- Equity investments are meant for long term wealth creation and more so with ELSS funds. Investors should hold on to the investment for a minimum period of 5 years, higher the better.

- Equity investments need to be looked at as means of wealth creation and not means of providing current income at regular intervals. Investors while investing into ELSS funds need to opt for either Growth plan or Dividend reinvestment plan and not Dividend plan.

- ELSS fund need not always be looked purely as a tax saving investment. It can be used as a means for long term wealth creation to meet financial objectives like retirement fund creation or children education fund creation etc.

- Apart from focussing on returns and tax savings, investors should also focus on the risks inherent in the investment and thereby choose investments on risk adjusted after tax performance basis.

- The reliance of investors on family and friends for seeking investment advice needs to given up in favour of personal research or in favour of financial planners and advisors. This would make the investment complement the financial goals of the investor.
Asset Management Companies

- The performance of ELSS funds as a category has been low as compared to Diversified Equity funds and Market indexes. Even individual funds showed high variability in performance over time. There was no consistency in performance of individual funds. The only factor that can be attributed to this underperformance seems to be the low AUM of ELSS funds and its consequential disinterest in managing the money efficiently by the fund manager. This needs to be corrected.

- The fund expense ratio charged towards ELSS funds has been higher as compared to Diversified Equity funds, although the portfolio turnover ratio for both types of funds is the same. This does not seem to be justifiable. The fund expense ratio of ELSS funds should be charged on par with Diversified Equity funds.

- In the marketing campaigns, more focus can be placed on younger population, private sector employees and business / self-employed investors. Similarly efforts should be made to tap investments from low savings category of investors as the penetration in this group is less.

- Investor education is very essential for penetration of mutual funds across investor categories. Investor education programs need to be held so that the awareness for ELSS funds as a tax saving alternative emerges.

- Fund distribution network needs to be strengthened as awareness of ELSS funds as a tax saving investment, can be brought out only through personal interaction. Distributors can also help in cross selling other mutual fund products to customers. The investors acceptance of news- paper and magazine information is less and therefore reliance on this mode may be reduced.
Government / Regulator

- As investors awareness with regard to ELSS funds has been low, and that investor’s preference for the advisor community is high, it is very important to reenergise the fund distributor / advisor category by providing them adequate incentives so that ELSS as a tax saving investment option becomes more popular.

- As a number of ELSS funds have a very low AUM, it is difficult to bring about fund manager interest into managing these funds. Similarly the distinction between ELSS funds and Diversified Equity funds does not exist in from the fund management perspective. Therefore it is prudent to allow tax benefit to all investments up to the eligible amount, for investments made into Diversified Equity funds also subject to lock in period.

- As equity investments are meant for long term capital appreciation, the Dividend pay-out option in ELSS funds can be reconsidered. Tax saving funds can have Growth option and Dividend reinvestment option. This would reduce the liquidity burden on the fund and bring about consistency in performance.

- All tax saving investments under section 80C of the Income Tax Act, have a lock in period of 5 years except for ELSS funds, which have a lock in period of 3 years. In order to induce the investors to invest into ELSS funds, and make it a preferable investment, this lock in period can to be maintained at 3 years.

- At present the mandated allocation of AUM to equity for ELSS funds is 80 percentage. On the other hand, Diversified Equity funds have a mandated allocation of 65 percentage into equity. Although the mandated allocation to equity is 65 percentage in Diversified Equity funds, still, in order to enhance the return performance, fund managers have been investing on an average 90 percentage of their corpus into equity, which is almost the same as in case of ELSS funds. Therefore in order to provide the necessary flexibility to the fund manager, with regard to the asset allocation decision,
the mandated allocation of equity for ELSS funds can to be brought down to 65 percentage and made on par with Diversified Equity funds.

**6.05 Scope for further research**

This study has been limited to the understanding of investment performance and investors perception with regard to ELSS mutual funds. The study has considered for the purpose of analysing the investment performance a sample of diversified equity schemes and market indexes for performance benchmarking. Similarly the study for understanding the investor perception and preference for ELSS funds considered sample respondents residing in Bengaluru and its sub urban area. However there is ample scope for further research in this area which are as follows:

- Performance attribution of ELSS funds in comparison with Diversified Equity funds.
- Performance persistence of ELSS funds in comparison with Diversified Equity funds.
- Impact on fund ratings on investment performance and investor perception.
- Creating a model for ELSS benchmarking
- Impact of mutual fund distribution channels on fund inflows
- Impact of financial advisors on investors perception towards mutual funds
6.06 Conclusion

This study had the prime objective of analysing the investment performance of ELSS funds and investors perception towards it. The study in order to analyse the investment performance of ELSS funds considered data pertaining to the period 2000-01 to 2012-13. The study concluded that ELSS funds as a category has on an average underperformed the sample Diversified Equity funds category average and performed on par with Market indexes category average, for this period. The performances of individual ELSS funds were inconsistent during this period. The study did not find any other additional risk factors specific to ELSS funds as compared to investing in Diversified Equity funds except for a higher expense ratio.

Investor’s perception and preference towards ELSS funds too were studied through a survey, taking sample respondents from Bengaluru and its sub urban area. Investor’s perception of risk was lower in case of ELSS funds as compared to Diversified Equity funds. However there was no significant difference in their return expectation. Respondents, who have never invested in ELSS funds earlier, had least preference to ELSS funds as compared to other tax saving investments. Respondents who have invested in ELSS funds earlier had a medium preference for ELSS funds. There has been a positive response from non-investors, towards considering ELSS funds as an investment option in the future.

The success of ELSS funds as a category depends upon the understanding of the investment by investors. Understanding of the investment starts with awareness and ends with investment experience. Mutual fund distributors and advisors can play a vital role in enabling this at a faster pace. Asset Management Companies and Regulator need to work hand in glove in achieving this objective for the benefit of all stake holders.