Chapter 6
CONCLUSION

Elaborate and extensive investigation of the Mutual Fund Scenario, both global and domestic and the in-depth analysis of the Mutual Fund Expenses, Incomes, and Net Assets as well as the NAVs of the Fund Schemes carried out in the preceding chapters, lead to many striking and relevant findings. The major findings of the study are summarised under the following heads:

1. General findings from the overview of the profile of the industry
2. Findings from the Analysis of the Expenses
3. Findings from the Analysis of Incomes
4. Findings from the Analysis of the Net Assets and Corpus of the Funds
5. Findings from the Analysis of NAVs of the Schemes.

6.1 General Findings from the Overview of the Profile of the Industry

An extensive examination of the industry profile brings to light many valuable information regarding the industry in the global scenario as well as in the Indian context. These have been summed up below:

6.1.1 Global Scenario

Mutual Funds world-wide show substantial growth during the last 20 years. Though Mutual Funds as a strong pillar of the stock market system could take root only in 40 countries worldwide till 2005, the growth of the net assets worldwide was unprecedented since the 1990s. The global net assets rise from 9293.27 billion dollars in 1998 to 17769.39 billion dollars in 2005, registering a growth of 91.21% over the period under review. Occupying around 57% of the Worldwide Mutual Fund assets, the U.S constitutes the largest Mutual Fund Market in the world. Luxemburg,
France and Australia constitute the second, third and fourth largest markets in the world respectively. Investors in the Asia/Pacific and African regions hold only around 10% of the worldwide Mutual Fund assets. The average share of the net assets of India over the period from 1998-2005, is only 0.16% of the world total and in 2005, it is 0.23%. Development of Mutual Fund market across the world is highly asymmetric and lop-sided. The average share of the net assets of the African region in the global net assets is 0.165% which is too negligible. The top ten countries in the world occupy nearly 90% of the global net assets, of which 62.8% are held by US market. The total number of Mutual Funds rises from 50835 in 1998 to 56863 at the end of 2005, achieving a growth rate of 11.86% p.a. and the top ten countries on an average occupy 63% of it. The Global Scenario of net assets by Fund type constitutes on an average, Equity Fund 45.60 %, Bond Fund 20.2%, Money Market Funds 23.8%, Balanced 8.6% and others 1.7%

6.1.2 Indian Scenario

Until 1987, the Fund Industry in India had a monolithic structure, solely controlled by UTI. During the first phase of development of the Indian Mutual Fund Industry, which extends over a period of 23 years from 1964 to November 1987, the net assets of the Industry grew from Rs. 24.67 crores to Rs. 4563.68 crores and it registered a compounded annual growth rate of 26.78%. In the second phase of development which extended for a period of six years only from 1987 to 1993 and which was marked by the end of monopoly of the UTI and the entry of Public Sector Funds, the total net assets grew from Rs. 4563.68 crores to Rs. 47733.5 crores, registering a compound growth rate of 47.9%. The third phase of development in the Indian Mutual Fund Scenario which extended for 3 years from 1993 to 1996 witnessed the advent of a new era in the Indian Fund Industry with the entry of Private Sector Funds in 1993. Net assets of Fund Industry in the third phase grew from Rs.47733.5 crores to Rs.74315.3 crores with a compound growth of 16%.

The fourth phase of the Indian Fund Industry commenced from 1996 onwards and it is believed to continue till date. This phase is characterised by the imposition of stringent measures to control Mutual Fund business, through the issue of comprehensively revised SEBI (MF) Regulations 1996, the bifurcation of UTI into two separate entities, wide fluctuations in net assets and resource mobilisation, mergers and takeovers, closure of many Funds due to non-performance and setting up of many foreign Mutual Funds. Amidst many intermittent favourable and unfavourable
forces, the industry witnessed a new phase of consolidation and growth and the assets and resources mobilised grew substantially in the fourth phase. The share of Private Sector Funds in the market rose substantially during this period from 11.18% to 78.29%. The compounded annual growth rate of Net Assets in the industry during the period is 15.5%. The total resource mobilisation in the industry during the period registered a substantial rise in compound growth rate which stood at 61.8%. The current phase of development in the Fund industry (1997-2006) witnessed a compound growth rate of 69.6% in redemption/repurchases. The sales of units across the category achieved a compound growth rate of 43.1% during the period under review.

Striking similarity exists in the behavior pattern of category-wise redemption/repurchase with the amount of sales of units realised. Average redemption is the highest in the case of Liquid & MM Funds, followed by Income Funds. Notable shift in the structure and composition in terms of the type of Fund and the amount raised is witnessed in the Indian Fund Industry during 1997-2006 period. Of the three types of Funds operated in Indian market-namely open-ended, close-ended and the Assured Return, the last one is in a vanishing state. No new sales are forthcoming.

6.2 Findings from Analysis of Expenses

The analysis of expenses across the sectors of AMCs and among various Fund categories show that in the matter of incidence of expenses, there is no homogeneity and uniformity among various sectors of AMCs and between categories of Funds. Most of the variations in the operating expenses are found statistically significant across the sectors, whereas many of them are insignificant between categories. As regards the structural composition, it is found in most cases that non-operating expenses far exceed the operating expenses of AMCs. In the operational category, management expenses and deferred expenses are found to dominate in most of the cases. The major findings are as follows:

Component-wise analysis of expenses brings out the expense-income relationship with returns of the respective sectors as well as their trend patterns across the industry sectors and between Fund categories. It shows that the major items of expenses in the operating category are management fees, deferred revenue expenses, custody and legal charges, marketing and publicity, registrars and transfer agents, trustee fees and other operating expenses, of which management fees
constitute the highest. There are sector-wise and category-wise differences in majority of these items. Sector-wise differences in respect of all items are significant except in the case of custody and legal charges and deferred revenue expenses. However, category-wise differences are significant only in respect of items other than custody and legal charges, deferred revenue expenses, registrars and transfer agents fees, other operating expenses and other expenses.

Expenses like management fees, marketing and publicity, custody and legal charges and registrars and transfer agents fees in relation to the earnings are more in the case of predominantly foreign Joint Ventures. Deferred revenue expenses and other operating expenses are more in the case of Indian private sector including Joint Ventures. Category-wise, management fees, custody and legal charges, fees of registrars and transfer agents and other operating expenses are more in respect of Balanced Funds, whereas marketing and publicity, deferred revenue expenses and trustee fees are more in the case of Liquid Funds.

The expense-income relationship in respect of most of the expenses shows falling trend in the case of all sectors except UTI. In the case of UTI, however, this trend is upward in respect of all items except deferred revenue expenses and audit fees. Between categories of Funds also, this trend is falling in respect of majority of the items.

The total operating expenses in relation to the earnings of the respective sectors account for less than 37% in respect of all sectors, except for one year in the case of predominantly foreign Joint Ventures, where it goes upto 99.6%. However, in the case of UTI, in most of the years it is lower than the other sectors and it ranges only between 5.84% and 8.13% of its earnings. In respect of categories, it rises upto 91% of the total earnings of the respective category. However, the trend in this ratio is falling in respect of all sectors except UTI and in respect of all categories except Debt Funds.

It is noted that the non-operating expenses consisting of total investment losses and provisions constitute the major chunk of total expenses and eat away substantial portions of the earnings in respect of most of the sectors and categories, particularly during the initial years of the post-regulation era. During this period, huge investment losses and heavy provisions set apart lead to huge losses in respect of most of the sectors and categories. However, in the later years, all the sectors and categories could reverse the situation by bringing down these expenses substantially.
Variations in the expense-income ratios pertaining to the total losses on sale of investment and provisions are, however, statistically not significant across sectors as well as categories.

Sector-wise analysis over the years under review reveal that no uniformity exists in the matter of structure and composition as well as behaviour pattern of expenses, with respect to AMCs belonging to different sectors. In the case of UTI, the structure and composition of expenses fluctuate wildly. The total operating expenses first declines from around two thirds of the total expenses to less than one fifth but spurs up again; provisions increase from nearly one third of the total to around three fourth and then declines; loss on sale of investment fluctuates between 0.99% and 39.71%. Components of operating expenses also show wide fluctuations and erratic behaviour pattern. While management expenses almost double during the period, registrar and transfer agents fees decline with intermittent fluctuations. The averages of the expenses for the period under review also show high degree of asymmetry in the structural composition of expenses. While total operating expenses constitute on an average 38.67% of the total expenses, provisions account for 48.41% and loss on investment constitutes 12.93%.

Bank-sponsored AMCs present a picture quite different from that of UTI. In this case, the total operating expenses which constitute only around one-fourth of the overall expenses in the initial period rise to more than 50% of the total towards the end period while provisions which accounted for nearly two thirds of the total sharply declines to nearly one tenth. The loss on sale of investment which constitutes only around one tenth of the total expenses in the initial period jumps up to more than one third of the total towards the end. The constitution of the total operating expenses also is different from that of UTI. Around half of the total operating expenses is made up of management fees followed by deferred revenue expenses over the years. Other items, though fluctuating widely, are comparatively of lesser significance. The averages of the expenses during the period show that total operating expenses account for only an average of 25.12% of the total expenses, whereas, investment loss and provisions constitute 39.77% and 35.11% respectively.

Institution sponsored AMCs display a still different picture from that of the former cases, in the matter of structural composition and behaviour pattern. Throughout the period under review, the total operating expenses remain below 25%. Provisions which accounted for nearly two thirds of the total expenses in the
beginning, declines sharply to less than one tenth, whereas the total loss on sale of investment during the period undergoes violent changes which grows from 14.21% to 67.21%. Management expenses and deferred revenue expenses follow more or less similar pattern of Bank-Sponsored AMCs. These two items constitute the major chunk of operating expenses. Other items constitute only a minor share of the aggregate operating expenses. Averages of the expenses also show high degree of asymmetry in the structural composition. While total operating expenses occupy only an average of 18.96% of the total expenses, investment loss and provisions account for 50.25% and 30.79% respectively.

In the case of Indian Private Sector AMCs, the total loss on sale of investment which is of a non-operating nature, accounts for a considerable portion of the total expenses. Over the years, it ranges from 39.64% to 54.31% and for most of the period, it is around 45%. Total operating expenses account for around 45% in the initial period, but declines to around 22%. Provisions deplete gradually from nearly one thirds of the total expenses to a mere 6.38%. In the case of management expenses, in the initial period it is around 30%, which suddenly jumps to 54.26% over the period. As in the case of other sectors, here too deferred revenue expenses occupy a major percentage of the total operating expenses. However, it falls from around one thirds of the total in the initial period to around one tenth over the period. Custody and legal charges account for a major share in this case, though it shows declining trend. Other items are comparatively of lesser significance. The averages of the expenses for the period show that total operating expenses accounts for an average of 31.06%; investment losses 45.95% and provisions 22.99% of the total expenses.

In the case of predominantly Indian Joint Venture AMCs, it is seen that operating expenses occupy only a lesser percentage of total expenses when compared to other sectors. It is less than around one fifth of the total expenses throughout the period under review. Total loss on sale of investment displays erratic behaviour where it grows from nearly one thirds of the total to around three fourths at one time, however, declining further sharply to around one sixth of the total. Provisions show an erratic behaviour over the period. It fluctuates between 16.25% and 63.21%. Non-operating items are found to dominate the operating expenses in the overall expenses. The major portions of the operating expenses are, however, made-up of management fees which range from 35 to 53 percent, deferred revenue
expenses which range from 7 to 39 percent and custody and legal charges which
fluctuates between 6 and 15 percent. Marketing and Publicity expenses also occupy
a considerable share, where it grows from 4.79% to 18.76% during the period. The
averages of expenses for the period show that total operating expenses constitute
only an average of 16.96% of the total expenses, while investment losses and
provisions account for 43.02% and 40.03% respectively.

The structural composition and behaviour pattern of expenses in the case of
predominantly foreign Joint Venture are still different from all other sectors.
Provisions which account for a sizeable portion of the overall expenses of other
sectors, are negligible in the case of this sector. Operating expenses also account for
less than one fourth during the initial years. However, it grows to around two-thirds of
the total towards the end period. It is very pertinent to note that in the case of this
sector, total loss on sale of investment occupy far more than 75% of the total
expenses during the initial years and it is around 35% towards the end period. In the
composition of total operating expenses, management fee constitutes more than
40% in all the years. Marketing and publicity, custody and legal expenses and
registrar and transfer agents fee also constitute a sizeable portion of it. However, the
latter two items show a falling tendency over the years. Deferred revenue expenses
claim only a lesser percentage of the total expenses, when compared with other
sectors. The averages of the expenses during the period show that in this case while
total operating expenses and investment losses account for an average of 35.46%
and 56.46% of the total expenses, provisions account for only 1.88%.

The structure and composition vary widely and statistically in a significant
manner, across the sectors of AMCs. It is the non-operational items that constitute
the major chunk of the over all expenses incurred by AMCs across all the sectors.
Wide variations are noticed in the respective values of standard deviations also,
average the sectors which imply wide fluctuations among the sectors.

The trends in these expenses, however, are mixed during this period sector-
wise. In respect of a little more than half of the items, trends are found positive and
the rest negative.

Category-wise analysis brings out the lop-sided structure and erratic
behaviour of expenses during the period under consideration. In the case of
Balanced Funds, total loss on sale of investment which is a non-operating item
account for a lion’s share of Total Expenses. It rises from 10.67% to 80.31% over the
period. Except during the first year under review, the operating expenses are below 20% and it shows a falling tendency over the period. Provisions also steeply fall from 55.91% to 19.95% over the period. The major chunk of operating expenses is constituted by management fees which range from 46 to 57 percent, followed by deferred revenue expenses which range between 18 and 34 percent. Other items are comparatively of minor significance and of lesser variations. The averages of the expenses for the period show that total operating expenses constitute only an average of 16.82% of the total expenses, whereas, investment losses and provisions account for 48.14% and 35.05% respectively.

In the case of Debt Funds, the total operating expenses, having remained within a range of 13 to 33 percent for the first four years, suddenly surges to 73.85% in the last year and correspondingly, Provisions take a plummet to 16.07% from 54.35% during the period. Loss on sale of investment also plunges from 27.84% to 10.08% during the relevant period. On the operating expenses side, management expenses are well above 50% in most of the years. It is followed by deferred revenue expenses, which however, falls from 22.16% to 6.57%. Marketing and publicity expenses show a more than five fold increase during the period. Other items are of lesser significance showing minor variations. The averages for the period show that total operating expenses constitute 32.94% of the total expenses while investment losses and provisions constitute 28.62% and 38.39% respectively.

Liquid and Money Market Funds presents an entirely different picture as regards structural composition and behaviour pattern. A major chunk of its total expenses is comprised by operating expenses which range from 46.52% to 79.31%. Provisions, which account for a major share in all other cases, occupy only an insignificant proportion in this category. Loss on sale of investment forms a significant portion but shows falling tendency. It falls from 46.42% to 21.12% over the period. Management expenses witness a four fold rise during the period. Unlike other categories, marketing and publicity account for a comparatively higher percentage of operational expenses. It ranges from 11.22% to 37.49% over the period. Deferred revenue expenses, however, fall from 44.78% to 4.48%. The averages of the expenses for the period show the highly asymmetric structural composition. While total operating expenses and investment losses occupy an average of 65.26% and 31.65% of the total expenses, provisions claim only 2.03%.
In the case of Equity Funds also, the structure and composition of total expenses are lop-sided and skewed towards the non-operating side. Operating expenses, throughout the period, account for only less than one third of the Total expenses and it ranges between 15.83% and 29.53%. Loss on sale of investment occupies a major share incurring between 21.09 to 71.14 percent of the Total expenses. Rising from 21.09% to 71.14%, it further declines to 36.05% during the period under review. Provisions, however, decline from 58.69% to 34.42% during the period. As a component of operating expenses, management fee constitutes more than 40% throughout, followed by deferred revenue expenses, which, however, falls from 23.14% to 14.95%. Custody and legal charges as well as registrars and transfer agents fee, exert more influence on operating expenses, unlike in other cases. Total operating expenses on average constitute 20.57% while investment loss and provisions account for 47.13% and 32.30% respectively.

The trends in these expenses, however, are mixed during these periods category-wise also. In respect of a little more than half of the items, trends are found positive and the rest negative.

The structure and composition of the expenses of different categories of Funds are found highly asymmetric and skewed towards the non-operational items, but the variations between Funds are statistically insignificant.

The aggregate expense ratios which express the relationship between total expenses and the net assets range between 1.21% and 31.59%, across the sectors over the period under review. Except in the case of UTI, where it grows from 1.21% to 2.71%, in all other cases, these ratios witness sharp decline. In the case of Indian Private Sectors and Predominantly Indian Joint Ventures, the decline in the ratio is glaring. In the former case it falls from 20.1% to 2.05% and in the latter case, it falls from 29.57% to 5.71%. The Variations in the ratios across the sectors are found statistically significant.

The aggregate expense ratios between categories of Funds range between 0.51% and 18.49%. The minimum is in the case of Liquid Funds and maximum in the case of Balanced Funds. Expenses ratios in the case of Debt Funds range between 0.55% and 1.11%. In the case of Equity Funds these ratios range between 1.58% and 2.45%. In the case of Balanced Funds, it ranges from 0.56% to 18.49% and in the case of Liquid & MM, from 0.51% to 9.79%. Irrespective of category, these
ratios show a falling trend over the years. Variations in expenses ratios across Fund categories are statistically insignificant.

6.3. Findings from Analysis of Income

In the analysis of income of Mutual Funds across the sectors and between categories over the years, year-wise, component-wise as well as sector-wise, it is found that there is no homogeneity and symmetry among the various sectors of AMCs as well as between Fund categories. Sector-wise UTI dominates in the matter of income generation and a major chunk of the total income held is constituted by investment income and category-wise, Equity Funds are found to generate prominent share of total income in the industry. The income ratios which reflect the net income-net assets relationship are found to have improved over the years, though their variations are found statistically insignificant. All important findings are summed up as follows:

The analysis of the various components of the total income as a percentage of net assets of the corresponding sectors of AMCs and categories of Funds over the period highlight the highly asymmetric and lop-sided pattern of income holding prevailing in the Indian Fund industry. The major items of incomes are investment incomes including inter-scheme transfers, interest income and dividend income. Extra-ordinary income and other income are the other two items of income which are insignificant compared to net assets across the sectors and categories. There are sector-wise and category-wise difference in majority of items. In case of items like interest, inter-scheme investment income and other income, there are sector-wise significant difference. Similarly, in the case of dividend, interest and investment income including inter-scheme transfers, there are significant category-wise differences also.

While investment income as a percentage of net assets is the highest in respect of Bank-sponsored Funds, investment income from inter-scheme transfers is the highest in the case of UTI. Category-wise, however, both are the higher in respect of Equity Funds. Interest in relation to net assets is the highest in the case of UTI and dividend in respect of Bank-sponsored AMCs. Category-wise, interest is the highest in respect of Debt Funds in most of the periods and dividend is the highest in respect of Equity.
A mixed trend is seen in respect of the component-wise income-net assets relationship across the sectors and categories. While the trend is falling in respect of dividend and interest in respect of all sectors and categories, it is rising in respect of investment income in the case of all sectors and all categories other than Balanced and Liquid Funds. Inter-scheme investment income is, however, falling in respect of Equity and Liquid Funds but rising in the case of all sectors except private sector.

The total realised income as a percentage of net assets fluctuates between 2.49% and 28.72% across the sectors. It is the lowest in respect of predominantly foreign Joint Ventures and the highest in respect of Bank-sponsored AMCs. It is seen that total realised income in relation to net assets has an increasing trend in respect of all sectors except Indian private sector. Among Fund categories also total realised income in relation to net assets vary widely between 5.30% and 33.11% and the lowest and the highest are in respect of Liquid Funds. In respect of all other categories except the Liquid Funds, however, there is an upward trend in these ratios.

Other income as a percentage of net assets is only negligible in respect of all sectors except UTI, in which case it is negative on account of the peculiar accounting practice of UTI. Among Fund categories also, it is comparatively insignificant in respect of all categories, particularly Debt and Liquid.

The trend in the total income-net assets is, however, rising in respect of all sectors except the Indian private sector. Among Fund categories also, except in the case of Liquid Funds, these ratios show an increasing trend.

Analysis of the structural composition and behaviour pattern of incomes, sector-wise and category-wise over the period under review, reveals a highly asymmetric structure and violently fluctuating pattern. Sector-wise in the case of UTI, total realised investment income constitutes more than 93% of the total realised income throughout the period, and 'other income' shows negative balance during the first two years. Except in case of Profit from sale of investment (Inter-Scheme transfers), all components of investment income show a declining trend over the period. The averages of the income during the period also highlight the asymmetric structure and composition. In the case of UTI, 98.34% of its total income, on an average for the five year period consisted of realised investment income, of which more than half (50.13 %) is contributed by interest income and one fourth by profit from inter-scheme transfers.
In the case of Bank-sponsored AMCs, total realised investment income ranges from 60.28% to 97.24% of the total realised income over the period of which profit from sale of investment constitutes up to 79.68% during the period. Interest income, however, declines over the period from around one third of the total to nearly one tenth and dividend from 10.91% to a meagre 2.37%. The averages of the income for the period show that an average of 84.34% of the total income is made up of investment income which consist almost an equal proportion of Interest income and Profit from sale of investment. Dividend occupies only a lesser portion in the total income.

In the case of Institution-sponsored AMCs, more than 95% of the total income comprised investment income throughout the period and it is mainly made up of interest and profit from sale of investment. Interest, however, falls sharply from more than one half to less than one third. Profit from sale of investment rises from 29.26% to 61.36% during the period. The averages of the income for the period show that in the case of Institution-sponsored AMCs an average of 96.94% of the total income consists of realised investment income, which constituted mainly of Interest income and Profit from sale of investment. Dividend occupies only an average of 6.8% of the total income.

In the case of Private Sector AMCs, the total realised investment income constituted more than 90% of total realised income in most of the years. Interest declines from two-thirds to less than one-third but profit from sale of investment rises from nearly one-fourth to around two-thirds of the total during the period. The averages of the income for the period show that in the case of private sector AMCs, 89.37% of the total income is contributed by Investment income, which comprises, mainly Interest and Profit from sale of investment. Dividend occupies only an average of 9.79% of the total income.

Highly fluctuating and asymmetric structural composition and behavior pattern is noticed in the case of Predominantly Indian Joint ventures. Total realised investment income which formed 97.67% of the total income depletes to nearly half of it during the period but recovers again to 97.86 percent towards the end of the period under review. Another notable feature is the decline in the interest income and the sharp rise in profit from sale of investment. The former declines from around one half to nearly one fourth, and the latter rises from around one third to more than two third of the total. The averages of the income for the period show that in the case of
Predominantly Indian Joint Ventures 78.46% of the total income comprised Investment income which consists mainly of Interest income and Profit from sale of investment in almost equal proportions. Dividend occupies only an average of 7.19%.

Predominantly Foreign Joint Venture AMCs also present a picture quite identical with the Indian Joint Ventures. Realised investment income which constituted 100% of the total income in the initial year sharply declines to around one half of it in between but again shoots up to 99.95% towards the end of the period. Dividend and interest income which constituted around 50 percent each of the total in the beginning, decline sharply to less than one-fifth whereas Profit from sale of investment jumps from a meagre 0.80% to nearly three fourth of the total. The averages for the period show that in the case of predominantly foreign Joint Ventures, the Total income consists of 86.04% Investment income, which consisted of Dividend, Interest and Profit from sale of Investment. Dividend occupies a significant portion of the total income only in the case of Predominantly Foreign Joint Ventures where it is 24.48% and in all other cases, it is less than 10% only.

Variations in the structural composition of incomes across the sectors are found statistically significant.

Category-wise analysis of the structural composition and behavior pattern over the years reveal the asymmetric structure of the total income and erratic behaviour of components over the years. In the case of Balanced Funds, share of investment income in the total ranges from 72.04 to 98.28 percent and more than half of it is contributed by interest income. While dividend and profit from sale of investment show falling trend, profit from inter-scheme transfers show five fold growth over the period. The averages of the income for the period show that in the case of Balanced Funds about nine tenth of the total income on an average is made up of realised investment income, of which around two-third is contributed by interest. Profit from sale of Investment constitutes the next highest share while dividend occupies only less than one tenth portion.

More than 90 percent of the total income of Debt Funds during the period is contributed by investment income of which interest comprising 88.60% in the beginning year, declines to nearly one half of it and in its place profit from inter-scheme transfer shoots up from 1.59% to 30.10% during the period. Profit from sale of Investment and Total Other Income also show gradual rise over the period. In the case of Debt Funds, the averages for the period show that 95.57% of the total
income consisted of realised investment income and 78.12% of it is by way of interest. Dividend forms only a negligible portion of 2%.

Total income of the Liquid and MM Funds constituted almost fully of realised investment income of which around nine-tenth is made up of interest income over the period. Profit from sale of investment and inter-scheme transfers decline over the period and ‘Other Income’ contributes negligible portion of the total income. The averages for the period show that in the case of Liquid and MM Funds, 99.09% of the total income consisted of investment income of which 89.13% is interest. Dividend occupies only 0.17%.

Structural composition of Equity Funds presents a peculiar feature of negative balance under the head ‘Other Income’. 93.16% to 103.17% of the total income is covered by total realised investment income. In its composition, share of dividend and interest falls substantially from 16.75% to 6.84% and from 34.1% to 6.40%, respectively whereas, share of profit from sale of investment and inter-scheme transfers show considerable growth from 39.87% to 53.65% and from 9.28% to 33.11% during the corresponding period. The averages for the period show that the structural composition of Equity Funds has a different picture. The total realised investment income which amounts to 98.07% of the total income is contributed by dividend of 13.36% and Interest of 20.24% and profit from sale of investment including inter-scheme transfers of 67.67%. The variations in the structural compositions among categories are, however, statistically insignificant.

Income ratios which reflect the net income-net assets relationship show an overall improvement in these ratios over the years, across the sectors except Indian Private Sector, where it deteriorates from 13.58% to 11.68%. Spectacular improvement is noticed in the case of UTI, Bank sponsored, Institution sponsored and Predominantly Foreign Joint Ventures. Variations in the income ratios across the sectors are, however, found statistically insignificant. Income ratios, across the Fund category also show general improvement over the years in all categories except Liquid and MM Funds, where it depletes sharply from 33.82% to 9.43% over the period. Substantial improvement is noticed in the Equity Funds where it grows from 10.31% to 22.24%. Variations across the category are also found statistically insignificant.
6.4 Findings from Analysis of Corpus and Net Assets

Analysis of Corpus and Net Assets of the various Mutual Funds brings out the structural composition, asset holding and behaviour pattern of Net Assets and Corpus of various sectors of AMCs and Fund categories.

Structural composition of the Corpus of the industry shows that around three-fourth of the Corpus of the Fund industry is held by UTI during the period under review. However, the share of UTI and other public sector AMCs declines and shows falling trend, while that of Predominantly Indian and Foreign Joint Ventures and Indian Private Sector shows substantial increase over the period. UTI and non-UTI Public Sector Funds thus witness a decline in the Corpus while Private Sector including Joint Venture AMCs improve their position over the period. The variations in the percentage of compositions of the Corpus across the industry sectors are found statistically significant. In the case of Net Assets also, though UTI holds a major chunk over the years, as found in the case of Corpus, Net Assets witness falling trend in the UTI and non-UTI Public Sector Funds, whereas in the case of Private Sector including Joint Venture, Net Assets Holding substantially improves over the period.

Category-wise analysis of Net Assets shows that Equity Funds and Debt Funds hold more or less the same percentage of share in the total over the period. However, the share of Equity shows a falling trend while that of Debt is rising over the period. Balanced Funds also show rising trend. The share of Liquid and MM Funds in the total Net Assets is negligibly small throughout the period under review. The variations in the Net Assets held by different categories of Funds are found statistically highly significant.

A consolidated picture of the asset holding under various categories brings to light the highly asymmetric and lop-sided pattern of holding. UTI sector alone holds more than three fourth of the Net Assets under Equity and Debt Funds, more than half of Balanced and one fourth of the Liquid and MM. Only in the case of Liquid Funds, another sector that is the Private sector dominates UTI by holding 47.35% of the total. The variations found in the percentage of holdings across the sectors are statistically significant, whereas the variations between Fund categories are statistically insignificant.

Comparative analysis of Corpus, Net Assets, Expenses and Income, over the period across the sectors brings out the structural composition and inter-relationship
between these variables. Occupying about three-fourth of the Corpus and Net Assets, and incurring between one-third and two-third of Expenses, UTI produces around three-fourth of the Total income during the period under review. Comparison of actual income with the income predicted on the basis of the Corpus and Net Assets held and Expenses incurred shows that in the case of majority of the sectors, in most of the years, the actual exceeds the predicted. However, in the case of Predominantly Foreign Joint Ventures, the actuals are lagging behind the predicted in all the years. In the case of Indian Private Sector too, the actual is below the predicted in all but the first two years. The deviations between the actual and the predicted incomes are statistically significant in all the years under review.

Comparison of the actual Net Assets and the Net Assets predicted on the basis of the Corpus held, Income generated and Expenses incurred shows that in respect of most of the sectors in majority of years, the actual Net Assets exceed the expected. In the case of Institution-sponsored AMCs, however, it is found the actual lag behind the predicted in all the years under review. The deviations between the predicted and actual Net Assets are found statistically significant in all the years under review.

6.5 Findings from the Analysis of Scheme N A Vs

Analyses of scheme NAVs across the sectors and between categories bring to limelight many characteristic features of the MF industry in general and efficiency of AMCs in particular. The risk characteristics of schemes, the risk-return relationships, and their ability to generate riskless return, their market timing ability, the degree of diversification and the relationship between diversification and return and the overall efficiency of AMCs in managing their schemes have been analysed. The major findings are as follows.

In the case of more than one half of the Schemes across the sectors the average annual return is below 20% and 2.1% Schemes fetch only a negative return. Negative returns are reported in the case of Bank-sponsored, Private Sector and Predominantly Foreign Joint venture AMCs. All those Schemes that produce a return more than 100 percent belong to Private Sector including Joint ventures. 97 percent of the Debt Schemes and 100 percent of the Liquid and MM Schemes fall in the below 20% return category. Only 2.5% of the Equity and 12.5% of the Balanced Schemes come under this category. 97.5 percent of the Equity and 87.5 percent of the Balanced Schemes generate a return of more than 20% of which 85 percent
Equity produce more than 40% return. Negative returns are generated by Debt and Liquid Schemes only. The average return produced by Equity Schemes range from 46.42% to 88.62% across the sectors, the maximum detected in Predominantly Indian Joint Ventures and the minimum in Institution-sponsored AMCs. Average return in the case of Balanced Schemes across the sectors ranges from 26.31% to 58.41%, and the highest being Predominantly Foreign Joint Ventures and the lowest, Bank-sponsored Schemes. In the case of Debt Schemes the highest average return is 49.3% produced by Institution-sponsored Schemes and the lowest 5.41% is earned by Bank-sponsored Schemes. In the case of Liquid and MM Schemes the average return ranges between 5.09 and 6.17 percent only where the upper rate is in respect of Private Sector and the lower rate pertains to Indian Joint Venture schemes. The average return produced by various categories of Schemes in respect of each sector of AMCs reveals that across the sectors and among categories, it varies between five percent and ninety percent. In respect of all sectors it is lowest in respect of Liquid Funds and highest in the case of Equity Funds, excluding Institution-sponsored Funds where it is highest in respect of Balanced Funds.

Performance of different categories of Schemes operated by AMCs in the same sector is found to vary significantly, whereas, performance of similar Schemes across the sectors of AMCs is found not to vary significantly.

Schemes show variations with respect to risk characteristics across the sectors of AMCs. The majority of the Schemes across the sectors (51%) fall in the comparatively higher risk category in terms of standard deviation. The schemes are unevenly distributed among various slabs of SDs and the variations are significant too. Category-wise, while 100percent of the Debt and Liquid Schemes fall in the low-risk category, in the case of Equity and Balanced Schemes, 100 percent have a high-risk profile. Schemes across the categories too vary widely with respect to the standard deviation and hence with respect to risk characteristics.

Average value for the SD is the highest in the case of Equity Schemes which range from 6.36% to 7.62% across the sectors. Among the sectors, the highest is in respect of Bank-sponsored Schemes and the lowest in respect of Institution-sponsored Schemes. In the case of Balanced Schemes, the average SD across the sectors range from 2.82% and 6.53% and the highest is in the case of Bank-sponsored and the lowest in the case of Predominantly Foreign Joint Ventures.
Average SD in respect of Debt Schemes ranges between 0.78% and 1.17% of which the minimum is found in respect of Institution-sponsored and the maximum in Predominantly Indian Joint Ventures. In the case of Liquid Schemes the average SD is only between 0.14% and 0.39%, the lowest in respect of Institution-sponsored and the highest in respect of Predominantly Indian Joint ventures. For Equity and Balanced Schemes, the highest values for SDs observed in Bank-sponsored Schemes and for Debt and Liquid, the highest SDs are noted in Schemes sponsored by Predominantly Indian Joint ventures.

The risk characteristics among different AMCs under different industry sectors as represented by average SDs are found identical and homogeneous. Risk characteristics among different categories of Schemes, on the other hand, are not homogeneous or identical which implies that different categories of Schemes vary widely with respect to their risk characteristics. Average returns in respect of Schemes with lower SDs (low-risk class) are also low (below 7.04%) whereas, in the case of SDs ranging from 4 to 8%, the average return also grows from 46.87% to 79.03% across the sectors. Schemes with SDs above 8% produce return between 57.33% and 96.83% across the sectors. Return is found to be a function of risk across the sectors of the AMCs. However, variations in the rate of return between sectors are found statistically insignificant.

When Beta is used to evaluate risk, it is found that 5% of Bank-sponsored, 9% of Private Sector and 11% of Predominantly Indian Joint Venture Schemes have negative Beta. 52% of the total Schemes have Beta less than 0.4 and only 17% have Beta greater than 0.8. Beta is between 0.4 and 0.8 in respect 31% Schemes. Variations in the number of Schemes based on Beta across the sectors and variations in the distribution of Schemes between the different slabs of Beta are found statistically significant. Category-wise analysis reveals that negative Beta is observed in Liquid Schemes, Debt Schemes and Balanced Schemes. While 100% of both Debt and Liquid Schemes fall in the category of Beta below 0.4, only 2.5% of Equity and 25% of Balanced Schemes come under this class.

Average Beta is the highest in respect of Equity Schemes, where it ranges from 0.69 to 0.79 across the sectors. In the case of Balanced Schemes, it ranges from 0.31 to 0.51, in respect of Debt, between 0.02 and 0.09 and in the case of Liquid Schemes between -0.001 and 0.01. Average Beta is found negative only with regard to Liquid and MM Schemes. Where Beta is negative, return also is negative.
This is so in the case of Bank-sponsored, Private sector and Predominantly Foreign Joint Ventures. As Beta rises, rate of return also raises, which bring to light the relationship between the market timing and returns. Returns of the Schemes and their Beta are found to be highly dependent on each other. However, variations in the average return across the sectors are found statistically insignificant.

Sharpe Ratios, when applied to evaluate and assess the risk-adjusted return in the MF arena, reveal that in respect of 14% of the Schemes across the sectors, this Ratio is negative, which implies that these Schemes fail to generate a rate of return at least equal to the riskless return. Sector-wise, 17.5% of the Bank-sponsored, 13% of the Private Sector, 11.4% of the Predominantly Indian Joint Ventures and 15.5% of the Predominantly Foreign Joint Venture Schemes are those which fail to generate the riskless return. 84% of the total number of Schemes have Sharpe Ratio between zero and 8 and 2% above 8. Variations in the number of Schemes across the sectors are statistically insignificant and between different ranges of Sharpe Ratios are significant. In category-wise analysis it is found that 55% of the Liquid and MM Schemes, 18.9% of the Debt Schemes and 6.3% of the Balanced Schemes fail to cover the riskless return whereas no Equity Scheme falls in this class. While 89.2% of the Debt Schemes and 95% of the Liquid Schemes have a Sharpe Ratio less than 4, in respect of Equity and Balanced Schemes, 85% and 75% respectively have Sharpe Ratios greater than 4. Average Sharpe Ratio in respect of Equity Schemes vary between 4.65 and 6.08 across the sectors whereas in the case of Debt Schemes it ranges between -1.47 and 1.9 and Liquid Schemes between -0.94 and 4.69 and Balanced Schemes between 1.74 and 7.01. Variations in Sharpe Ratios are significant with respect to various categories of Schemes but not significant across industry sectors.

As per Treynor Ratios 12% of the total Schemes across the sectors fail to cover the riskless return in the market as indicated by the negative ratios and these include Bank-sponsored, Private Sector, Predominantly Indian Joint Ventures and Predominantly Foreign Joint Ventures. Distribution of Schemes based on Treynor Ratios across the sectors is homogeneous but between different ranges of the Ratio, it is not homogeneous. All those Schemes with negative Treynor Ratios belong to Debt and Liquid category. And in the case of the former, 18.9% and in respect of the latter, 45% fail to cover the riskless return in the market. All the Equity and Balanced Schemes are able to meet the riskless return that the market offers. Treynor Ratios
in respect of Equity Schemes range between 47.87 and 56.68 across the sectors, in respect of Balanced schemes from 2.26 to 71.85, in the case of Debt between 26.21 and 43.07 and in respect of Liquid Schemes between -15.75 and 19.13. Treynor Ratios between categories are not homogeneous.

Analysis based on Portfolio Alpha reveals that 29% of the total Schemes in the Indian MF market are underperformers or below par performers and 71% present above par performance. Break up of the below par performers reveals that in the case of Bank-sponsored 42.5%, Institution-sponsored 27.3%, Indian Private Sector 28.3%, Predominantly Indian Joint ventures 17.71% and Predominantly Foreign Joint ventures 27.6% come under this group. Category-wise, Alpha brings out that in the case of Equity and Balanced Schemes 2.5% and 18.8% respectively are below par performers whereas it is as high as 48.6% and 70% in the case of Debt and Liquid Schemes. Average Alpha in respect of Equity Schemes ranges from 10.5 to 19.05 across the sectors whereas it is between -2.75 and 15.54 in respect of Balanced Schemes and between -1.85 and 0.52 in respect of Debt and between -0.33 and 0.53 in respect of Liquid Schemes. Various ratios computed in respect of Equity, Balanced, Debt and Liquid Schemes indicate that the messages they send out as regards the various aspects of Scheme performance are identical.

Analysis applying R-square reveals that 61% of the Schemes across the category resort to only a lesser degree of diversification indicated by the low values for their R-square. 28% Schemes have R-square between 20 and 40 which implies moderate level of diversification and only 11% have R-square greater than 40 which is indicative of a reasonable degree of diversification. Sector-wise break up of the schemes with R-square below 20 reveal that around two thirds of the schemes in respect of all sectors fall in the R-square below 20 class and hence fall in the less diversified class. Distribution of Schemes based on R-square is not homogeneous across the sectors and between different slabs of R-square. In category-wise analysis, it is found that 90.5% of the Debt Schemes and 100% of the Liquid schemes fall in R-square below 20 classes. Only 31.3% of Equity and 18.8% of the Balanced Schemes come under this group. Diversification is poor in the case of Debt and Liquid Schemes, whereas better in the case of Equity and Balanced Schemes. R-square in respect of Equity Schemes range between 20.28 and 34.85 across the sectors and in respect of Balanced schemes, between 15.72 and 40.8. In the case of Debt, it varies between 2.73 and 7.29 and in respect of Liquid and MM between 1.26
and 2.36. The greater the R-square, the higher the rate of return. Rate of return based on R-square is found higher in the case of Private Sector and Joint Ventures compared to Public Sector. Analysis of Return-R square relationship indicates that greater diversification leads to higher returns.

6.6 Suggestions

Based on the findings mentioned above, the following suggestions are made which will be helpful to those who are associated with the Mutual Fund Industry.

As regards the Fund industry, in the matter of incidence of expenses as well as generation of income, there is no homogeneity and uniformity across the sectors of AMCs and among categories of Funds. Across the sectors, most of the expenses differ significantly. However, among categories, differences are not as significant as in the case of sectors. The significantly different expenses among the various sectors of AMCs operating under identical economic and social conditions call for deliberate perusal. A very significant feature of the expense profile of Indian Fund Industry is the overwhelming role of the total investment loss and provisions which are of non-operating nature, in the total expenses. It cannot be considered as a healthy symptom. Excessive incurrence of total investment loss and the huge amount set apart for provisions present a cause for serious concern, though over the years most of the sectors could bring them down considerably. Still they pose threat in the case of UTI and predominantly Indian Joint Ventures where they exceed even more than half of the total expenses in some years. Hence conscious and earnest efforts on the part of the fund managers are required for bringing it down to reasonable levels.

In the case of Equity, Balanced and Debt Funds also, non-operating expenses in the form of loss on sale of investments and provisions, though showing a falling trend, constitute a lion’s share of the total expenses. This fact also calls for serious attention on the part of fund managers.

One of the major components of the operating expenses across the sectors and categories is the management expenses which consist mainly of the advisory fees paid to the sponsor by the AMCs. In many cases, total operating expenses show rising trend mainly because of the rise in management expenses. This aspect calls for conscious consideration. Another operating expense that should draw the attention of the fund managers on account of its excessiveness is the deferred revenue expenses which consist mainly of the initial issue expenses written off.
Another feature exhibited in respect of operating expenses is that private sector AMCs, including Joint Ventures spend more on marketing and publicity than public sector AMCs. While the public sector spends only less than one percent of their earnings on this item throughout the period under review, it is above one percent in the case of private sector AMCs during most of the period. It may be taken as a reason for the gradual decline in the share of public sector in terms of corpus and net assets. Hence, it is advisable for the public sector to step up this expense, as it can influence the market share, to effectively compete with the private sector.

A positive symptom exhibited in the Indian Fund Industry is that the expense ratios which indicates the expense-net assets relationship are falling in respect of all sectors and categories except UTI. However the reason for its upward trend in the case of UTI is to be probed into.

As far as income is concerned, in most of the sectors and categories, a major portion of the total income consists mainly of profit from sale of investment, including inter-scheme transfers. It is an indicator of the fact that AMCs do not hold their investment for longer period, they resort mainly to market operations of frequent buying and selling. In a wider perspective, this practice is not suitable for a healthy capital market, as they do not engage in genuine investment.

At the same time, the steep decline in the dividend income in respect of all sectors of AMCs calls for attention, as it may be, at least to some extent, due to the faulty selection of securities. Though the fall in these sources is compensated by investment income in all the sectors, it shall not go unnoticed that particularly in the case of UTI, the increase in investment income is due to inter-scheme transfers, which does not require much investment skill. Fund managers should, therefore, make earnest attempt to apply better security selection techniques.

Corpus and net assets holding in the Fund industry are highly asymmetric and UTI is the largest holder of these two. However, a declining trend is visible in the share of public sector as a whole including UTI, which indicates the weakening of the public sector. It is a major concern which shall not be ignored. The reasons why the income and net assets of some of the sectors do not rise to the level warranted by their Corpus and expenses, also require careful perusal.

In respect of returns based on NAVs, the fact that the Bank-sponsored, Private Sector and Predominantly Foreign Joint Venture schemes generate negative returns in some of their schemes in Debt and Liquid categories is to be given serious
attention. However, Equity and Balanced Funds in most of the sectors generate reasonably good returns.

Though nearly three fourths of the Fund schemes present above-par performance, only less than 50 percent of them manifest an average skill of market timing ability and reasonable degree of diversification. This is a significant matter which should draw the attention of the fund managers. It assumes greater importance in the light of the findings of this study that market timing and portfolio diversification have bearing on the Fund returns. However, it is to be noted that in the matter of diversification, private sector is ahead of public sector which highlights the strength of the former.

In respect of risk characteristics, risk-return relationship, ability to cover riskless returns, earning capacity, outperforming in the market, risk diversification and market timing ability, it has to be noted that all the sectors of AMCs are homogeneous, whereas, significant differences exist in respect of all these factors among categories. This is a very pertinent aspect which requires due attention.

In order to rectify some of the weaknesses the industry suffer from and to strengthen them in an overall manner, it may be desirable to introduce stronger supervisory norms, improved standards of disclosure, better planning for risk minimisation, improved efforts for better diversification and development of better skill for improved market timing ability, use of better prediction techniques and extensive research for better selection techniques and ability.

In this context, it may be in the fitness of things to consider the award of SRO (Self Regulatory Organisation) status to the AMFI, more regulatory powers to SEBI and in respect of Mutual Funds, a reorientation in the functions of SEBI so as to take leadership of a massive awareness campaign to educate the investors and the public with the help of agencies in the financial field.

Another step to be considered is to seek ways and means to simplify the complexity involved in the organisational structure of the Fund mechanism. The involvement of too many agencies such as the sponsor, trustees, AMCs, custodians, transfer agents, bankers, brokers and the like create not only administrative bottlenecks and undue delay in policy formulation and its implementation, but also leads to heavy administrative and establishment expenses.
6.7 Scope for Further Research

The following topics offer scope for further research in this area.

2. Study of Investment Strategies as well as Performance Evaluation of Individual AMCs.
3. Comparison of Public Sector and Private Sector AMCs.

6.8 Conclusion

The findings of the study reiterate that there exist wide range of diversities in the matter of profile, structural composition and behaviour patterns in respect of expenses, income, corpus and net assets of AMCs as well as in the risk characteristics, risk-return relationship, ability to cover the risk-less returns, market timing ability and portfolio diversification of Fund schemes across the sectors and categories. Only less than fifty percent of the schemes operated by AMCs manifest an average skill of market timing ability and reasonable degree of portfolio diversification. However, in respect of the risk characteristics, risk-return relationship, earning capacity, degree of portfolio diversification, ability to cover the risk-less returns and the market timing ability in the Indian Fund Industry, in spite of all the divergent features, there are no significant differences across the sectors of AMCs, whereas, in respect of these factors significant differences exist among Fund categories. All the ratios computed are indicative of this phenomenon. It is, thus, apparent from the findings that category of schemes is more important in Fund performance rather than sectors of AMCs in the Indian scene.

With 29 Asset Management Companies and an expanding economy and increasing investor population, the Indian Mutual Fund Industry has a very bright future and it can again scale new heights by implementing the suggestions as have been inferred in the present study.