Indian insurance industry has passed through many hurdles and hindrances to attain the present status since inception. However, the income earning capacity, eagerness and awareness of the general public are the key determinants of the growth of any insurance industry. In the Indian context, the insurance habits among the general public during the independence decade was rare but there was remarkable improvement in the Indian insurance industry soon after the economic reform era (1991) due to healthy competition from many national and international private insurance players. The insurance business has been changing across the globe and the rippling effect of the same can be observed in the Indian market as well. The insurance industry in India has started to reveal the potential after the process of reforms were started on the basis of recommendations of R.N. Malhotra committee, which was set up in 1993 with an objective of creating a more efficient and competitive financial system suitable for the Indian economy. The committee strongly felt that in order to improve the customer services and increase the spread of the insurance, this sector should be opened up to competitions. The reforms in insurance sector resulted into liberalization, privatization and globalization of insurance industry in India. The insurance industry in India has witnessed paradigm shift in a relatively short span of time since liberalization (1999). Since liberalization, there has been surge in premiums, players and outreach in Indian insurance industry. Post liberalization and favorable regulatory environment put in force by the regulator (IRDA), has given fillip to insurance penetration and insurance density. The insurance industry, like many other industries has also
become competitive with insurers offering multiple products and with continued product differentiations. Combinations of these factors, along with strong economic growth during last decade or so have positioned India as a regional insurance hub and now aspire to become an international financial centre.

In present study, an attempt has been made to evaluate the financial performance of public sector non-life insurance companies along with comparative financial performance evaluation of public and private sector insurance companies during the post reform period. The study was conducted to achieve following objectives:

1. To evaluate the financial performance of public sector non-life insurance companies in post reform period.
2. To appraise the comparative financial performance of public sector and private sector non-life insurance companies in the post reform period.
3. To study the investment pattern of public sector non-life insurance companies in post reform period.
4. To make suggestions to improve the performance of insurance industry in India.

To achieve the objectives and to test the hypotheses of the present study different tools and techniques of data analysis have been used. These include percentage, table, diagrams, graphs, ratio, mean, median, standard deviation, coefficient of variation, method of least square and linear trend. The present chapter sums up the main findings of the study and lastly outlines the relevant suggestions in this regard.

7.1. Major Findings

Major findings of the present study have been discussed under various heading as under:
7.1.i. Findings Regarding Spread and Growth of Insurance Industry during Post Reform Period

- The study reveals that there is an increasing trend in the life insurance volume in India. It has increased almost six times from 10504 million dollars in 2001 to 60442 million dollars in 2011.

- No doubt, life insurance volume has increased during the period under study but it is still very low as compare to the developed nations.

- Non-life insurance volume has increased continuously in India. It has increased from 2459 million dollars in 2001 to 12187 million dollars in 2011, which looks impressive, but if the comparison is made with other top economies of the world, India has the lowest non-life insurance volume.

- Life insurance density has continuously increased during the study period except the year 2011. Despite an impressive growth in life insurance density in the post reform period in India, it is still very small as compare to other top economies of the world.

- Non-life insurance density in India has increased about five times during the period under study. No doubt, the figure looks impressive but it is still lowest in India as compare to other top economies of the world.

- Life insurance penetration in India has increased from 2.15% in 2001 to 3.8% in 2011. The worldwide penetration of life insurance is almost stagnant. The figures of India look better if the comparison is made with other developing countries like China, Brazil and Russia. However, India is far behind the developed nation like USA, UK, Japan and France in life insurance penetration.
• No doubt, the non-life insurance penetration in India has shown marginal increase during the period under study, it is still the lowest as compare to other countries of the world under study during the post reform period.

• The study reveals that after opening up of the insurance sector for private participation, India has reported increase in both insurance density and penetration up to 2010. After 2011, it is showing a decline in the trend.


• The study reveals that net premium indices have been increased in all the public sector companies under study. In 2011-12, it was highest in NICL followed by UIICL, OICL and NIACL respectively. Net premium have been significantly increased in all the four companies during last four years of the study period.

• The results of $\chi^2$ test reveals that there has not been any significant difference between actual net premium and computed net premium in all the four public sector non-life insurance companies during the period of study.

• Indices of total income in all the four public sector non-life insurance companies have increased during the period of study. The increase in total income was mainly due to increase in net premium income. Index of total income during 2011-12 was highest in NICL followed by UIICL, OICL and NIACL respectively.
• The results of $\chi^2$ test reveals that there has not been any significant difference between actual total income and computed total income in all the four public sector non-life insurance companies during the period of study.

• Total outgo, which includes claim paid, operating expenses, commission paid, benefits to policyholders and other expenses incurred, has increased in all the four companies during the period of study. During the last four years of the study period, total outgo has increased rapidly. Main reason for this increase in total outgo was hike in staff salaries, increase in managerial expenses and other staff related expenses. Index of total outgo in 2011-12 was highest in NICL followed by NIACL, UIICL and OICL respectively.

• The results of $\chi^2$ test reveals that there has not been any significant difference between actual total outgo and computed total outgo in all the four public sector non-life insurance companies.

• Ratio of total outgo to total income was highest in NICL followed by NIACL, OICL and UIICL respectively during the study period. The main reason for high percentage in NICL was the large scale of business operations in comparison to other companies under study.

• The results of ANOVA reveals that there was no significant difference in the ratio of total outgo to total income between the companies but there was significant difference in the ratio of total outgo to total income between the years.

• The ratio of net claim to total outgo have shown fluctuated trend in all the companies during the period of study. The average percentage of net claim to total outgo was highest in NICL.
followed OICL, UIICL and NIACL respectively. Net claim represent the major portion of total outgo in all the companies.

- The results of ANOVA reveals that there was no significant difference in the ratio of net claims to total outgo between the companies but there was significant difference in the ratio of net claims to total outgo between the years.

- The average ratio of net commission to total outgo was highest in NIACL followed by OICL, NICL and UIICL respectively. The main reason for low ratio of net commission to total outgo was increase in the commission of re-insurance ceded.

- The results of ANOVA reveal that was significant difference in the ratio of net commission to total outgo between the companies and between the years.

- Operating expenses to total outgo has shown fluctuated trend in all the four companies during the period of study. Operating expenses represents a major portion in the total outgo of all the insurance companies after net claims. The average ratio of operating expenses to total outgo was highest in UIICL followed by OICL, NICL and NIACL respectively.

- The results of ANOVA reveal that there was significant difference in the ratio of operating expenses to total outgo between the companies and between the years.

- The average ratio of net premium to total income was highest in NIACL followed by NICL, UIICL and OICL respectively. Net premium represent a major portion in the total income of the insurance companies and it has a direct impact on the profitability of the insurance companies.
The results of ANOVA reveal that there was significant difference in the ratio of net premium income to total income between the companies and between the years.

The ratio of net premium to gross premium is an important parameter to evaluate the financial efficiency of public sector non-life insurance companies. The average ratio of net premium to gross premium was highest in NIACL followed by NICL, UIICL and OICL respectively. The ratio of net premium to gross premium has increased sharply during the last four years of the study period.

The results of ANOVA reveal that there was significant difference in the ratio of net premium to gross premium between the companies and between the years.

Ratio of net claims to gross premium is also an important indicator of financial efficiency of the insurance companies. The average ratio of net claims to gross premium was highest in NICL followed by NIACL, OICL and UIICL respectively.

The results of ANOVA reveal that there was no significant difference in the ratio of net claims to gross premium between the companies but there was significant difference in the ratio of net claims to gross premium between the years.

The average ratio of operating expenses to gross premium in all the four public sector non-life insurance companies has exceeded the prescribed limit of 19 percent. The ratio was highest in UIICL followed by OICL, NICL and NIACL respectively. All the companies are required to control their operating expenses.

The results of ANOVA reveal that there was no significant difference in the ratio of operating expenses to gross premium
between the companies but there was significant difference in the ratio of operating expenses to gross premium between the years.

- The average ratio of income from sale or redemption of investment to total income was highest in NICL followed by OICL and UIICL equally. In NIACL it was lowest.
- The results of ANOVA reveal that there was significant difference in the ratio of income from sale or redemption of investment to total income between the companies and between the years.

- The ratio of income from interest, rent and dividend to total income has fluctuated trend in all the four companies during the period of study. The average ratio was highest in UIICL followed by OICL, NIACL and NICL respectively. Income from interest, rent and dividend is second largest income of public sector non-life insurance companies after premium income.
- The results of ANOVA reveal that there was significant difference in the ratio of income from interest, rent and dividend to total income between the companies and between the years.

- The average earning ratio was highest in UIICL followed by NIACL, OICL and NICL respectively. It never turned negative in UIICL during the period of study. Management of UIICL and NIACL has earned sufficient profit on net premium as compare to OICL and NICL.
- The results of ANOVA reveal that there was significant difference in the earnings ratio between the companies and between the years.
- Operating ratio is one of the most important ratios to judge the operational efficiency of the business concern. The average operating ratio was highest in UIICL followed by NIACL, OICL
and NICL respectively. In UIICL, it never turned negative during the period of study. Operational efficiency was lowest in NICL whereas it was highest in UIICL.

- The results of ANOVA reveal that there was significant difference in the operating ratio between the companies and between the years.

- The return on net worth indicates the profitability of the owner's investment. The average return on net worth ratio was highest in UIICL followed by NIACL, NICL and OICL respectively. The ratio was positive throughout the study period in UIICL. The year 2006-07 was the best year for all the four companies for return of investment.

- The results of ANOVA reveal that there was no significant difference in the return on net worth ratio between the companies but there was significant difference in the return on net worth ratio between the years.

- The average current ratio was highest in NIACL followed by NICL, OICL and UIICL respectively. It means working capital position in NIACL was comparatively better and its management has better managed its working capital. Working capital position in NICL and OICL was almost equal and satisfactory. However, in UIICL working capital position was lowest and not satisfactory.

- The results of ANOVA reveal that there was significant difference in the current ratio between the companies and between the years.

- The ratio of current assets to total assets in all the four companies has registered fluctuated trend during the period of study. The average ratio of current assets to total assets was highest in
NIACL followed by NICL, OICL and UIICL respectively. NIACL was in a better position as compare to other companies to make prompt payment of incurred claims. The position of UIICL was not satisfactory to make prompt payment of incurred claims.

- The results of ANOVA reveal that there was significant difference in ratio of current assets to total assets between the companies and between the years.

7.1.iii. Findings Regarding Investment Pattern of Public Sector Non-Life Insurance Companies during Post Reform Period

- As per IRDA guidelines, general insurance companies are required to satisfy the investment norm of not less than 30% investment in government securities and other approved securities.

- The average investment in government securities and other approved securities was highest in UIICL followed by OICL, NIACL and NICL respectively. Average investment in government securities and other approved securities was less than the IRDA guidelines of not less than 30% in all the companies under study.

- The results of ANOVA reveal that there was significant difference in the percentage share of investment in government securities and other approved securities between the companies and between the years.

- As per IRDA guidelines, general insurance companies are required to invest in infrastructure and social sector not less than 10% of their total investment.
• The average percentage share of investment in infrastructure and social sector was highest in UIICL followed by OICL, NICL and NIACL respectively. UIICL was the only company where the average percentage share of investment in infrastructure and social sector was greater than the investment norm of not less than 10%.

• The results of ANOVA reveal that there was significant difference in the percentage share of investment in infrastructure and social sector between the companies and between the years.

• As per IRDA guidelines, investment subject prudential/exposure norm should not be exceeding 55% in general insurance companies.

• The average percentage of investment subject to prudential/exposure norm was highest in NICL followed by NIACL, OICL and UIICL respectively. All the companies have higher average percentage of investment subject to prudential/exposure norm than the IRDA norm of not exceeding 55% except UIICL where it was 51.45 percent during the period of study.

• The results of ANOVA reveal that there was significant difference in the percentage share of investment subject to prudential/exposure norm between the companies and between the years.

• Percentage share of investment in other than approved investment should not be exceeding 25% as per IRDA guidelines.

• The average percentage share of investment in other than approved investment was highest in UIICL followed by OICL, NIACL and NICL respectively. All the companies have satisfied the investment norm of not exceeding 25% in all the years of the
study period, as the percentage share of investment in other than approved investment was less than 25% in all the companies during the period of study. All the companies have the tendency to reduce the investment in other than approved investment.

- The results of ANOVA reveal that there was significant difference in the percentage share of investment in other than approved investment between the companies and between the years.
- As per IRDA guidelines percentage share of investment in housing sector should not be less than 5%.
- Only NIACL has made investment in the housing sector, which is also less than 5% in all the years of the study period. Hence, none of the companies has followed the investment norm of not less than 5% in housing sector in all the years of the study period.

7.1.iv. Findings Regarding Comparative Financial Evaluation Of Public Sector And Private Sector Non-Life Insurance Companies During Post Reform Period

- Public sector non-life insurance companies have paid comparatively higher claim and were more consistent in the payment of claim than the private sector insurance companies were during the period of study.
- Private sector companies have concentrated more in the creamy business. They have ignored loss-making portfolio, such as motor business to reduce their claim-incurred ratio. The public sector insurance companies have also not re-insured much of their business in contrast to the private sector players who have
re-insured most of the business to reduce their claim incurred ratio.

- Private sector insurance companies had to spend a huge amount on operating expenses during the initial years of the reforms to establish themselves. However, with the passage of time, private sector non-life insurance companies took various cost effective measures, which led to improve their operational performance.

- Both the public sector and private sector insurance companies have breached the section 40C of Insurance Act 1938, which laid down that management expenses should not exceed 20% of net premium.

- Public sector insurance companies have the higher average combined ratio as compare to private sector companies except the first three years of the study period. Private sector insurance companies have wide variation in combined ratio as compare to public sector insurance companies.

- The average underwriting loss was higher in public sector insurance companies than the private sector insurance companies. Public sector insurance companies also have low variation and more consistency in underwriting result ratio than the private sector insurance companies.

- The average investment income was higher in the public sector insurance companies and public sector insurance companies have low variation and more consistency in investment income as compare to private sector insurance companies.

- Assets allocation and asset management was comparatively better in public sector insurance companies and also the investment decisions were comparatively effective and efficient in public sector insurance companies.
• The average net retention ratio of public sector non-life insurance companies were higher than private sector insurance companies and there was less variation and more consistency in net retention ratio of public sector insurance companies as compare to private sector insurance companies.

• The investment income offset the effect of underwriting loss and contributes to the profitability of non-life insurance companies. The main reason for higher investment income of the public sector insurance companies was their high net retention ratio, which enabled them to sue more premium as investment.

• The average operating ratio of public sector insurance companies was significantly higher than the private sector insurance companies. Public sector insurance companies have earned higher operating profits than private sector insurance companies have and there were more consistency and less variation in operating profits as compare to private sector insurance companies.

• The average earning ratio of public sector insurance companies was significantly higher than the private sector and public sector insurance companies have more consistency and less variation in their earning as compare to private sector insurance companies.

• The average return on equity was significantly higher in public sector insurance companies. Public sector insurance companies have shown positive average return on equity for all the years of the study period except the year 2001-02. Public sector insurance companies also have low variation and more consistency in the return on equity as compare to private sector insurance companies.
7.2. Conclusions

The insurance industry in India has been changing rapidly after the opening up of insurance sector in 1999. It has become highly competitive after the entry of the private players in the industry. Both the life insurance and non-life insurance volume has increased manifold during the reform period but it is still very low as compare to developed nations of the world. Similarly, insurance density and insurance penetration has also increased but still India is far behind the developed nations. No doubt, net premium and total income of the four public sector companies have increased during the reform period but it has been neutralized by the similar rise in the total outgo, which include net claim, operating expenses, net commission etc. None of the four public sector companies has satisfied the investment norm of IRDA during the study period. No doubt, the private sector non-life insurance companies are posing a challenge to public sector companies, but still the investment income, net retention ratio, operating ratio, earning ratio and return on equity was comparatively higher in public sector non-life insurance companies.

7.3. Suggestions

On the basis of above analysis and findings the following suggestions are made:

- The public sector non-life insurance companies have shown higher incurred claim ratio because these companies got majority of their business from loss making portfolio like motor and health. It is suggested that these companies should also focus on the other profitable portfolios like fire, marine, personal accident, engineering etc. It may reduce their claim ratio, which would result into their better underwriting results. The balanced portfolio
performance of the public sector non-life insurance companies will also enhance their growth rate.

- Both the public and private sector non-life insurance companies should cut their management expenses. For controlling, the management expenses unprofitable branches and unproductive work force if curtailed will save a huge amount for public and private sector non-life insurance companies. The companies should have to meet the prescribed norms formed by IRDA for management expenses.

- Management expenses should be properly put into cap and insurance companies who do not adhere to the cap should be fined and ultimately legally challenged. New, effective and cost efficient distribution channels should be the focus area to restrict growing marketing costs.

- Proper risk evaluation, pricing and risk selection will surely help insurance companies in proper claim management, expense management, consequently will lead to decrease in the combined ratio for non-life insurance companies, and ultimately will result into underwriting profitability.

- Public sector non-life insurance companies have shown comparatively higher underwriting loss than private sector insurance companies have. The main reason for higher underwriting loss in public sector companies was low reinsurance of their business. Therefore public sector non-life insurance companies should also reinsurance most of their business to reduce underwriting losses.

- The comparative profitability of the public and private sector non-life insurance companies have shown that main reason for the higher profitability of the public sector non-life insurance
companies was their higher investment income during post reform period. The higher investment income of the public sector non-life insurance companies has compensated their underwriting losses. The higher investment income of the public sector insurance companies is due to their aggressive investment portfolio policy and better performance of the share market. However, the chances for improvement in investment income in future are uncertain as per the current market situations. Therefore, the public sector non-life insurance companies must focus on sustainable profitability business model by emphasizing on improvement in the underwriting results to achieve greater profitability and to achieve better underwriting results.

- The investment income offset the effect of underwriting loss and contributes to the profitability of non-life insurance companies. The main reason for higher investment income of public sector insurance companies was their high net retention ratio, which enabled them to use more premium as investment. Therefore, private sector non-life insurance companies should also try to improve their net retention ratio to increase investment income and profitability.

- Increasing focus on underwriting discipline should be undertaken to avoid underwriting losses, to increase profitability and to be competitive. Every segment should be seen in terms of underwriting capacity and be priced accordingly.

- The underwriting should aim at profitable underwriting rather than mere share gaining chase. Proper risk evaluation is also facilitated by price deregulation and in view of increasing purchasing power of individuals; profitable but competitive pricing should be the area of focus.
• Only operational performance should be taken into consideration while reflecting company’s performance. More importantly, every segment should highlight its underwriting performance at the end of financial year and imperfection may accordingly be weeded out.

• Both public and private sector non-life insurance companies should adopt new technique of information technology and ensure quality product at competitive price to survive in the market. These companies should also explore alternative methods to reduce cost.

• Both public and private sector non-life insurance companies should become learning organizations and invest in training and development to cope up with the competitive environment.

• To improve the customers retention and loyalty, both the public and private sector non-life insurance companies should focus more on improving procedures and formalities of claim settlement so that claim can be settled as early as possible and also reasonable amount of claim should be paid to the customers.

• IRDA should allow non-life insurance companies to have a diversified and risk balanced investment portfolio. This will help non-life insurance companies to enhance their investment income.

• Non-life insurance companies should be allowed to raise fund from stock market to enable them report profitable figures.

• Proper risk management practices should be mandatory. Especially operational and market risk management should be addressed in all insurance companies in the line of bank risk management so that hard earned money of insured is protected.

• The companies should launch customized insurance product, as per the needs of customers. One of the bigger advantages of price deregulation is different prices for different needs; however, the
facility is only present in economic literature for Indian customers. The insurers need to properly tailor their products accordingly.

- Proper risk selection and thereafter proper risk evaluation should be done by all insurers. In view of growing tendency of grabbing more market chase, proper risk selection process is ignored, which consequently leads to poor risk evaluation and ultimately losses.

- Adoption of cost effective and viable distribution system should be made mandatory. Modern era of computers and information technology calls for looking of cost effective and viable distribution system of insurance products, the benefits of which can show immediate impact in the shape of decreasing costs and adding to profits margin.

- Investment of funds by non-life insurance companies should be strictly as per the prescribed norms of IRDA.

- Non-life insurance companies should put more effort to popularize the non-life insurance in the rural areas.

7.4. Scope for Future Research

In the present study, an attempt has been made to evaluate the financial performance of public sector non-life insurance companies during the post reform period. There still remains prospect for future research.

- Human resource practices, marketing strategy etc. of public sector and private sector life and non-life insurance companies during the post reform period can be studied.

- Service quality level of public sector and private sector life and non-life insurance companies can also be assessed.
• In the present study, the focus has been on the comparative financial performance of public sector and private sector non-life insurance companies. Future research can be done to analyze the comparative performance of both life and non-life insurance companies. Further comparative inter countries performance of life and non-life insurance companies can be made.

• In the present study, the investment pattern of public sector non-life insurance has been studied. A comparative study of investment pattern of public and private sector life and non-life insurance companies can also be made.