FINDINGS AND CONCLUSION

7.1 INTRODUCTION

The insurance industry in India has witnessed paradigm shift in a relatively short span of time since liberalization (1999). Since liberalization there has been a surge in premiums, players and outreach in Indian insurance industry. Post-liberalization and favorable regulatory environment put in force by the regulator (IRDA) have given a 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 the last decade or so, have positioned India as a regional insurance hub, and now aspires to become an international financial centre.

In Post-liberalization scenario, the insurance industry has changed significantly because of several factors. Channel innovation has ensured that insurers are able to reach to a wider customer base and technology innovations have enabled the industry to leapfrog over developed markets. The liberalization has also been extended to pricing by way of de-tariffication and in future may further be extended to product terms and structure. However, given the global economic scenario and its fallout on the Indian economy, the Indian insurance industry has also witnessed the negative impact of the economic meltdown during the last one and a half years. The recent change in the market environment has forced players to revisit their expansion plans as well as their overall business strategy. Several players are seeking to undertake cost efficiency measures, process re-engineering, and are reviewing their organizational structure etc.

It is very surprising that increasing public reach, inflating premiums, product innovations have been accompanied by increasing underwriting losses, which remains the big issue even today. Against this backdrop, the study was aimed at evaluating the Productivity and financial performance of insurance industry and how insurers are responding to these changes which is of utmost importance. In the present study, an attempt has been made in the previous chapters to analyze the financial performance and
productivity of life insurance companies in India. The present chapter sums up the main findings of the study and lastly outlines the relevant suggestions in this regard.

7.2 SUMMARY OF FINDINGS

7.2.1 Growth and Progress of Life Insurance Companies in India

Number of Branches

The number of branches of life insurance companies in India considerably increased during the study period 2001-02 to 2010-11. Number of branches of LIC increased from 2190 in 2001-02 to 3371 in 2010-11 with a mean value of 2546 branches and achieved lowest compound growth rate of 4.41 per cent. In private life insurers ICICI branches increased from 14 to 1402 during the study period with a mean value of 836 branches, and achieved a highest compound growth rate of 77.82 per cent. Followed by SBI life branches which increased from 5 in 2001-02 to 629 in 2010-11. It has a mean value of 206 branches and achieved a compound growth rate of 73.78 per cent. Kotak life achieved a lowest compound growth rate of 38.03 per cent with a mean value of 100 branches per year and its branches increased from 9 in 2001-02 to 203 in 2010-11. And other life insurance branches growth found a compound growth rate which may vary from 54.88 per cent to 69.82 per cent.

Number of Agents

The number of agents of life insurance companies in India considerably increased during the study period 2001-02 to 2010-11. Number of agents of LIC increased from 442680 in 2001-02 to 1337064 in 2010-11 with a highest mean value of 825851 agents per year and a highest compound growth rate of 99.52 per cent. In private life insurers Reliance agents increased from 95622 in 2006-07 to 189433 in 2010-11 with a mean value of 81442 and a compound growth rate of 401.18 per cent. Followed by MET life agents which increased from 417 in 2001-02 to 28840 in 2010-11 with a compound growth rate of 69.82 per cent with a mean value of 2268 agents per year. SBI life compound growth rate found 65.95 per cent with a mean value of 29767 agents. A lowest Compound growth rate of TATA life found 31.82 per cent with a mean value of 52027 agents per year. Its agents increased from 7038 in 2001-02 to 87223 in 2010-11 due to its
change of marketing technique and less operational activities. Other private life insurance compound growth rate may vary from 41.25 per cent to 58.48 per cent.

**Number of Policies**

The number of policies of life insurance companies in India may fluctuate during the study period 2001-02 to 2010-11. LIC captured more policies due to its long run operation in the market. LIC policies increased from 25545580 in 2002-03 to 37012277 in 2010-11 with a mean value of 44943349 and a highest compound growth rate of 151.18 per cent. In private life insurers Bajaj and Reliance have a highest compound growth rate of 47.91 per cent with a mean value of 1406800 in Bajaj, and 809673 policy in Reliance life. Followed by SBI life policies which increased from 48360 in 2001-02 to 939978 in 2010-11 with a mean value of 567714 policies and a compound growth rate of 44.54 per cent. TATA & ING life recorded a lowest compound growth rate of 23.02 per cent. TATA life insurance policies increased from 106753 in 2001-02 to 553203 in 2010-11 with a mean value of 402550 policies. ING life insurance policies increased from 53405 in 2001-02 to 274401 in 2010-11 with a mean value of 205104 policies. Other private life insurance compound growth rate may vary from 28.82 per cent to 41.25 per cent. Due to change of the nature of policies, maturity value, and other marketing technology they are not able to capture more policies.

**Share Capital**

Life insurance companies share capital increased due to expansion of its business except LIC. LIC had a fixed share capital of Rs.500 lakhs from 2001-02 to 2010-11. There is no growth due to its well establishment from the year 1956 onwards. SBI life had a share capital of Rs.12,500 lakhs in 2001-02 which increased to Rs. 10,00,000 lakhs in 2010-11 with an average capital of Rs.1,47,000 lakhs per year and a high compound growth rate of 47.91 per cent. Followed by MET life capital which increased from Rs.11,000 lakhs in 2001-02 to Rs.1,96,957 lakhs in 2010-11 with an average capital of Rs.74,654.40 lakhs with a compound growth rate of 44.54 per cent. Bajaj life showed a lowest compound growth rate of 0.06 per cent with an average capital of Rs.15,036.50 lakhs. Its capital varied from Rs.15,000 lakhs in 2001-02 to Rs.15,079 lakhs in 2010-11. Other private players share capital compound growth rate varied from 302 per cent to 38.03 per cent during the study period. Their share capital varied due to establishment of its business in the initial stage.
Gross Premium

Gross premium collected by the life insurance companies in India may vary year to year due to its establishment of business throughout India. LIC collected a highest gross premium from the select life insurance companies an amount of Rs.49,82,191 lakhs in 2001-02 to Rs.2,03,47,340 lakhs in 2010-11 and a lowest compound growth rate of 17.48 per cent due to entry of more private players in India from 2000 onwards. In private life insurers Reliance has a highest compound growth rate of 151.18 per cent with mean value of Rs.2,27,072.60 lakhs. Its premium varied from Rs.28 lakhs to Rs. 6,57,115 lakhs in 2010-11. Next to Reliance MET life, SBI life, and Bajaj life secured a compound growth rate 99.52 per cent. Its premium fluctuated year by year. ING life collected a gross premium of Rs.419 lakhs in 2001-02 to Rs.1,70,895 lakhs in 2011-12 with an average gross premium of Rs.75,380.50 lakhs in 2010-11 with an average gross premium of Rs.75,380.50 lakhs with a compound growth rate 86.20 per cent. HDFC life insurance recorded a lowest compound growth rate of 58.48 per cent with an average premium of Rs.2,32,949.80 lakhs collected. Other private player’s compound growth rate varied from 69.82 per cent to 81.97 per cent due to its less value of policy, maturity time and other terms and conditions.

Commission Expenses

The commission expenses of LIC recorded a lowest compound growth rate of 12.20 per cent, with an average commission of Rs.8,27,798.50 lakhs paid during the study period. Its commission increased from Rs. 4,51,791 lakhs in 2001-02 to Rs.13,30,868 lakhs in 2020-11. Reliance life insurance recorded a highest compound growth rate of 151.18 per cent with an average commission of Rs.21,574.30 lakhs paid during the study period. Next to Reliance SBI life and MET life recorded a compound growth rate of 99.52 per cent with a mean value of 29,147.16 lakhs , Rs. 11,642.80 lakhs respectively. SBI life insurance commission expenses increased from Rs.19 lakhs in 2001-02 to Rs. 67,105 lakhs in 2010-11 MET life commission expenses increased from Rs.16 lakhs in 2001-02 to Rs.8,732 lakhs in 2010-11. In private players TATA life insurance recorded a lowest compound growth rate of 47.91 per cent with a mean value of Rs.14,766.60 lakhs TATA life insurance commission expenses increased from Rs.572 lakhs in 2001-02 to Rs. 24,628 lakhs in 2010-11. ICICI life insurance also recorded a lowest compound growth rate of 47.91 per cent with a mean value of Rs.38,093.20 lakhs per year. The
commission expenses of life insurance companies varied due to heavy competition between the players.

Claims paid

Claims paid by life insurance companies in India may fluctuated during the study period 2001-02 to 2010-11. LIC paid an average claim of Rs.47,69,851.20 lakhs with a low compound growth rate of 20.22 per cent and its claim increased from Rs.17,47,664 lakhs in 2001-02 to Rs.1,11,24,119 lakhs in 2010-11. LIC paid less claims due to more dependability of public sector. In private players Reliance life, HDFC life and Kotak life recorded a high compound growth rate of 216.22 per cent due to its surrender of policies and high maturity value during short period. Reliance paid an average claim of Rs.31,422 lakhs per year, HDFC life insurance paid an average claim of Rs.55,899 lakhs per year and Kotak life insurance paid an average claim of Rs.22,624.10 lakhs. In private players TATA life recorded a lowest compound growth rate of 58.48 per cent with an average claim of Rs.14,328.70 lakhs. Its claim increased from Rs.123 lakhs in 2001-02 to Rs.70,920 lakhs in 2010-11. The claim expenses growth changed due to the more collection in proper policies in the beginning of the years like in 2010-11ULIP policies.

Operating Expenses

The operating expenses of life insurance companies had a fluctuating trend throughout the study period due to the establishment of the new business from the year 2000 onwards. LIC recorded a low operating expenses compound growth rate of 14.81 per cent, with a mean value of Rs.7,96,381.10 lakhs its expenses increased from Rs.4,26,040 lakhs in 2001-02 to Rs.16,98,028 lakhs. In private players Bajaj and MET recorded a highest compound growth rate of 62.18 per cent. Bajaj spent average operating expenses of Rs.92,567.60 lakhs and its expenses increased from Rs.2,511 lakhs in 2001-02 to Rs.1,60,658 lakhs in 2010-11. MET spent average expenses of Rs.28,756.40 lakhs with a range of Rs.653 lakhs in 2001-02 to Rs.56,360 lakhs in 2010-11. ING & Kotak recorded a low compound growth rate of 38.03 per cent during the study period. ING mean value was Rs.26,699.30 lakhs and Kotak mean value was Rs.28,603.60 lakhs. The lowest compound growth rate arises due to less operating expenses of LIC compare to other private players.

Working Fund

232
The working fund of the life insurance companies in India fluctuated during the study period 2001-02 to 2010-11 due to establishment of the business from 2000 onwards. The working fund of the LIC ranges from Rs.16,71,753 lakhs to Rs.44,86,715 lakhs. It was recorded a highest compound growth rate of 17.48 per cent with a mean value of Rs.18,30,846.60 lakhs. ICICI recorded a highest negative working fund of Rs.40,102.80 lakhs, SBI recorded a negative working fund of Rs.24,006.30 lakhs, next the highest negative working fund of Bajaj was Rs.20,306.70 lakhs. HDFC recorded a lowest negative average working fund of Rs.996.40 lakhs. All the private players working fund showed a negative value throughout the study period because they spent more operating expenses and commission expenses in the initial stage in high establishment expenses spend for the opening of branches throughout India.

Net profit

Profit position of the select life insurance companies in India fluctuated during the study period. The net profit of the LIC alone showed a highest compound growth rate of 7.15 per cent with a mean value of Rs.80,186.40 lakhs. Its profit varied from Rs.82,179 lakhs in 2001-02 to Rs.1,17,180 lakhs in 2010-11. All the private life insurance companies’ profit showed a negative value throughout the study period. ICICI recorded a highest negative average profit of Rs.46,257.30 lakhs. In 2010-11 its profit recorded as a positive profit of Rs.80,762 lakhs. Reliance recorded a negative average profit of Rs.28,031.60 lakhs in the study. In private players Bajaj earned an average profit of Rs.10,387.60 lakhs. And SBI also has an average profit of Rs.36,634 lakhs. Private life players spent more expenses in the initial stage like establishments of branches, infrastructure development, operating expenses and commission expenses. In the short run they are not able to attain BEP (Break Even Point). Private players earn profit only after reaching the BEP.

Total Assets

Total assets of the select life insurance companies in India showed considerable increasing trend from the year 2001-02 to 2010-11. LIC maintained a highest total assets of Rs.12,82,12,858 lakhs in 2010-11 with an average assets of Rs.6,45,36,126.80 lakhs and achieved a lowest compound growth rate of 20.22 per cent. In private players Reliance and Bajaj life achieved a highest compound growth rate of 94.98 per cent during the study. Because they have well established their branches throughout India. SBI achieved a highest compound growth
rate of 90.54 per cent with an average total assets of Rs.10,02,615 lakhs. HDFC achieved next highest compound growth rate of 77.82 per cent with a mean value of Rs.8,21,524.80 lakhs. Other private players’ total assets also have a compound growth rate of 58.48 per cent to 69.82 per cent.

7.2.2 Multiple Regressions regarding growth and progress of life insurance companies

LIC: The result of econometric test establishes .984 i.e., 98 per cent of correlation between the variables tested in the case of LIC. The $R^2$ value at .968 states that all the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 96.80 per cent influence on the dependent variable gross premium.

Birla life insurance: The result of econometric test establishes .884 i.e., 88 per cent of correlation between the variables tested in the case of BIRLA. The $R^2$ value at .781 states that all the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 78.10 per cent influence on the dependent variable gross premium.

ICICI life insurance: The result of econometric test establishes .772 i.e., 77 per cent of correlation between the variables tested in the case of ICICI. The $R^2$ value at .595 states that all the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 59.50 per cent influence on the dependent variable gross premium.

ING life insurance: The result of econometric test establishes .987 i.e., 98 per cent of correlation between the variables tested in the case of ING. The $R^2$ value at .974 states that all the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 97.40 per cent influence on the dependent variable gross premium.

HDFC life insurance: The result of econometric test establishes .971 i.e., 97 per cent of correlation between the variables tested in the case of HDFC. The $R^2$ value at .942 states that all the ten independent variables tested i.e., number of branches, number of agents, number of
policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 94.20 per cent influence on the dependent variable gross premium.

Max New life insurance: The result of econometric test establishes .742 i.e., 74 per cent of correlation between the variables tested in the case of MAX NEW. The R² value at .550 states that all the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 55 per cent influence on the dependent variable gross premium.

Reliance life insurance: The result of econometric test establishes .802 i.e., 80 per cent of correlation between the variables tested in the case of Reliance. The R² value at .643 states that all the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 64.30 per cent influence on the dependent variable gross premium.

TATA life insurance: The result of econometric test establishes .584 i.e., 58 per cent of correlation between the variables tested in the case of TATA. The R² value at .341 states that all the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 34.10 per cent influence on the dependent variable gross premium.

MET life insurance: The result of econometric test establishes .971 i.e., 97 per cent of correlation between the variables tested in the case of MET. The R² value at .942 states that all the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 94.20 per cent influence on the dependent variable gross premium.

SBI life insurance: The result of econometric test establishes .958 i.e., 95 per cent of correlation between the variables tested in the case of SBI. The R² value at .917 states that all the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 91.70 per cent influence on the dependent variable gross premium.

Bajaj life insurance: The result of econometric test establishes .542 i.e., 54 per cent of correlation between the variables tested in the case of Bajaj. The R² value at .293 states that all
the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 29.30 per cent influence on the dependent variable gross premium.

**Kotak life insurance:** The result of econometric test establishes .807 i.e., 80 per cent of correlation between the variables tested in the case of Kotak. The $R^2$ value at .651 states that all the ten independent variables tested i.e., number of branches, number of agents, number of policies, share capital, commission paid, claim paid, operating expenses, working fund, net profit and total assets have 65.10 per cent influence on the dependent variable gross premium.

### 7.2.3 Productivity of life insurance companies in India

**Agents Productivity**

Gross premium productivity of agent of life insurance companies in India fluctuated during the study period. The overall gross premium productivity of agent of life insurance companies in India, MET and Bajaj have the highest growth of 41.25 per cent per annum. Bajaj life per agent collected an average premium of Rs.3.14 lakhs, MET life agents collected an average premium of Rs.2.82 lakhs. ING life agents collected an amount of Rs.0.369 lakhs in 2001-02 and increased to Rs.4.889 lakhs in 2010-11 with an average premium of Rs.2.29 lakhs per agent. TATA life agents collected an amount of Rs.0.300 lakhs in 2001-02 and increased to Rs.4.569 lakhs in 2010-11 with an average premium of Rs.2.71 lakhs per agent collected. LIC agents collected an amount of Rs.11.255 lakhs in 2001-02 and increased to Rs.15.218 lakhs in 2010-11 with an average premium of Rs.13.21 lakhs per agent and a low compound growth rate of 2.32 per cent. HDFC life found a lowest compound growth rate of 1.39, with an average mean of Rs.3.38 lakhs per agent. Other insurers’ compound growth rate changed from 20.22 per cent to 23.02 per cent during the study. The growth rate of agents’ productivity changed due to increasing and decreasing of life agents.

**Branch Productivity**

The overall gross premium productivity per branch of life insurance companies in India, Reliance has found the highest growth of 69.82 per cent per annum, with an average premium per branch of Rs.291.26 lakhs. Its branch premium varied from Rs.1.65 lakhs in 2001-02 to 526.53 lakhs in 2010-11. MET life found the next highest growth of 47.91 per cent per annum, with an average
premium per branch was Rs.614.39 lakhs. Its branch premium varied from Rs.16 lakhs in 2001-02 to 928.95 lakhs in 2010-11. ICICI found the lowest negative growth of 2.27 per cent per annum, with an average premium per branch of Rs.1322.55 lakhs. Its branch premium varied from Rs.831.29 lakhs in 2001-02 to 1275.37 lakhs in 2010-11. LIC found the lowest growth of 12.20 per cent per annum, with a highest average premium per branch of Rs.4361.76 lakhs. Its branch premium varied from Rs.2274.97 lakhs in 2001-02 to 6036 lakhs in 2010-11. Other insurers’ compound growth rate changed from 4.71 per cent to 31.82 per cent during the study period. The growth rate of branch productivity changed due to opening of new branches in the recent time and heavy competition between the insurers.

Policies Productivity

The overall gross premium productivity per policy of life insurance companies in India, ING has the highest compound growth of 44.54 per cent per annum with an annual average of Rs.0.30 lakhs per year per policy. ING policy premium varied from Rs.0.01 lakhs in 2001-02 to Rs.0.62 lakhs in 2010-11. SBI has the highest compound growth of 41.25 per cent per annum with an annual average of Rs.0.48 lakhs per year per policy. Its policy premium varied from Rs.0.03 lakhs in 2001-02 to Rs.0.137 lakhs in 2010-11. Bajaj has the highest compound growth of 41.25 per cent per annum with an annual average of Rs.0.28 lakhs per year per policy. Its policy premium varied from Rs.0.01 lakhs in 2001-02 to Rs.0.62 lakhs in 2010-11. LIC has the lowest compound growth of 9.64 per cent per annum with an annual average of Rs.0.33 lakhs per year per policy. LIC policy premium varied from Rs.0.29 lakhs in 2001-02 to Rs.0.55 lakhs in 2010-11. Other insurers’ compound growth rate changed from 17.48 per cent to 38.03 per cent during the study period. The growth rate of policies productivity changed due to low periodical premium of the policy and also nonpayment of the installment premium.

Capital Productivity

The overall gross premium contribution to capital productivity of life insurance companies in India, Reliance and Bajaj have the highest growth of 113.79 per cent per annum. Reliance average capital productivity found Rs.33.96 lakhs per year and its capital contribution in the year 2001-02 found Rs.0.002 lakhs and increased to Rs.5.636 lakhs in 2010-11. Bajaj average capital productivity found Rs.2.13 lakhs per year and its capital contribution in the year 2001-02 found Rs.0.048 lakhs and increased to Rs.63.73 lakhs in 2010-11. MET life also has a highest
compound growth rate of 65.95 per cent, its average capital productivity found Rs.0.79 lakhs per year and its capital contribution in the year 2001-02 found Rs.0.004 lakhs and increased to Rs.1.273 lakhs in 2010-11. LIC has a lowest compound growth rate of 17.48 per cent, its highest average capital productivity found Rs.23,167.11 lakhs per year and its capital contribution in the year 2001-02 found Rs.9,964.38 lakhs and increased to Rs.40,694 lakhs in 2010-11. Its capital productivity shows high due to more collection of premium but only a fixed capital of Rs.500 lakhs. Other private players’ ratio may varied from a compound growth rate of 14.81 per cent to 51.35 per cent. Private players’ capital fluctuations led to changes in capital productivity.
7.2.4 Multiple Regressions regarding Productivity efficiency

**LIC:** The result of econometric test establishes .914 i.e., 91 per cent of correlation between the variables tested in the case of LIC. The $R^2$ value at .835 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 83.50 per cent influence on the dependent variable gross premium.

**BIRLA life insurance:** The result of econometric test establishes .940 i.e., 94 per cent of correlation between the variables tested in the case of BIRLA. The $R^2$ value at .883 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 88.30 per cent influence on the dependent variable gross premium.

**ICICI life insurance:** The result of econometric test establishes .988i.e. 98 per cent of correlation between the variables tested in the case of ICICI. The $R^2$ value at .976 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 97.60 per cent influence on the dependent variable gross premium.

**ING life insurance:** The result of econometric test establishes .936i.e, 93 per cent of correlation between the variables tested in the case of ING. The $R^2$ value at .876 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 87.60 per cent influence on the dependent variable gross premium.

**HDFC life insurance:** The result of econometric test establishes .832i.e, 83 per cent of correlation between the variables tested in the case of HDFC. The $R^2$ value at .692 states that all the five independent variables tested i.e., gross premium productivity of agent,
gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 69.20 per cent influence on the dependent variable gross premium.

**MAX NEW life insurance:** The result of econometric test establishes .984 i.e., 98 per cent of correlation between the variables tested in the case of MAX NEW. The $R^2$ value at .968 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 96.80 per cent influence on the dependent variable gross premium.

**Reliance life insurance:** The result of econometric test establishes .942 i.e., 94 per cent of correlation between the variables tested in the case of Reliance. The $R^2$ value at .887 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 88.70 per cent influence on the dependent variable gross premium.

**TATA life insurance:** The result of econometric test establishes .961 i.e., 96 per cent of correlation between the variables tested in the case of TATA. The $R^2$ value at .923 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 92.30 per cent influence on the dependent variable gross premium.

**MET life insurance:** The result of econometric test establishes .982 i.e., 98 per cent of correlation between the variables tested in the case of MET. The $R^2$ value at .964 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 96.40 per cent influence on the dependent variable gross premium.

**SBI life insurance:** The result of econometric test establishes .949 i.e., 94 per cent of correlation between the variables tested in the case of SBI. The $R^2$ value at .900 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 90.00 per cent influence on the dependent variable gross premium.
productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 90 per cent influence on the dependent variable gross premium.

**Bajaj life insurance:** The result of econometric test establishes .901 i.e., 90 per cent of correlation between the variables tested in the case of SBI. The $R^2$ value at .811 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 81.10 per cent influence on the dependent variable gross premium.

**Kotak life insurance:** The result of econometric test establishes .986 i.e., 98 per cent of correlation between the variables tested in the case of SBI. The $R^2$ value at .972 states that all the five independent variables tested i.e., gross premium productivity of agent, gross premium productivity per branch, gross premium productivity per policy, gross premium contribution to capital productivity and agent contribution to capital productivity have 97.20 per cent influence on the dependent variable gross premium.

### 7.2.5 Liquidity Ratio

#### Current Ratio

LIC shows a decreasing trend 4.97 times in 2001-02 to 3.72 times in 2010-11 with a mean value of 2.29, a standard deviation of 1.20, and achieved a highest compound annual growth rate of 2.09 per cent. The current ratio of Birla showed an increasing trend 0.59 times in 2001-02 to 0.86 times in 2010-11 with a mean value of 0.73, a standard deviation of 0.10, and achieved a highest compound annual growth rate of 2.32 per cent. The decrease in ratio is a danger signal to the management. ICICI shows a decreasing trend 0.83 times in 2001-02 to 0.42 times in 2010-11 with a mean value of 0.61, a standard deviation of 0.14, and achieved a negative compound annual growth rate of 6.67 per cent.

ING current ratio changed from 0.59 times to 2.33 times, a mean value of 1.06, a standard deviation of 0.50, and achieved a negative compound annual growth rate of 2.27 per cent. HDFC current ratio shows decreasing trend from 1.61 times to 0.80 times, it shows less liquidity. MAXNEW current ratio shows decreasing trend from 2001-02 to 2010-11, with a
mean value of 0.71, a standard deviation of 0.16 and achieved a negative compound annual rate of 1.14 per cent. It shows less liquidity. Reliance current ratio shows continuously down-fall from 13.15 times in 2001-02 to 0.79 in 2010-11, with a mean value of 2.13, a standard deviation of 3.33 and showed a negative annual growth of 14.88 per cent.

TATA current ratio ranges from 0.62 times to 3.65 times during the study, a mean value of 1.17, a standard deviation of 0.90 and negative compound growth rate of 12.90 per cent. MET life showed 4.23 times in 2001-02 then reduced to 0.65 times in 2010-11, a mean value of 1.20, a standard deviation of 1.12 and a negative growth rate of 14.88 per cent. SBI shows a mean value of 1.39 times, a standard deviation of 1.48 and a negative annual growth rate of 20.56 per cent. Bajaj life showed a current ratio from 1.23 times in 2001-02 to 0.78 times in 2010-11, an average current ratio of 0.82, a standard deviation of 0.27 and a negative growth rate of 6.67 per cent. Kotak life current ratio finds 2.80 times in 2001-02 to 0.72 in 2010-11, an average current ratio of 1.29 times, a standard deviation of 0.69, and achieved a negative growth rate of 12.90.

It concludes that the LIC and BIRLA has better when compared to other life insurance companies. This means the company would have a better short-term financial standing to meet its debt obligations. The decreasing current ratio is a danger signal to the management.

**Quick Ratio**

The quick ratio reveals the vitiation in the ratio throughout the study period. LIC the lowest quick ratio of 0.39 per cent was observed in 2004-05 and the highest ratio of 1.70 per cent in 2001-02. Its mean value was 0.83 per cent, a standard deviation of 0.41 and a negative annual growth rate of 1.37 per cent. BIRLA quick ratio fluctuates from 0.26 per cent to 0.70 per cent, a mean value of 0.53, a standard deviation of 0.14 and a highest annual growth rate of 7.15 per cent. ICICI quick ratio changes from 0.19 per cent to 0.45 per cent, a mean value of 0.35, a standard deviation of 0.11 and a negative annual growth rate of 6.67 per cent.

ING quick ratio fluctuates from 0.10 per cent to 1.87 per cent, a mean value of 0.61, a standard deviation of 0.50 and a negative annual growth rate of 2.27 per cent. HDFC observed a quick ratio 0.23 per cent in 2009-10, 1.36 per cent in 2003-04, a mean value of 0.79, a standard deviation of 0.38 and a negative annual growth rate of 14.88 per
cent. MAXNEW quick ratio fluctuates from 0.04 per cent to 0.47 per cent, a mean value of 0.16, a standard deviation of 0.12 and a negative annual growth rate of 12.90 per cent. Reliance average quick ratio shows 1.83 times, a standard deviation of 3.93 and negative annual growth of 14.88 per cent was observed.

TATA life average quick ratio 0.59 times, a standard deviation of 0.68, and a negative annual growth rate of 16.82 per cent was fined. MET life quick ratio showed 0.22 times in 2009-10 and 2.19 times in 2001-02 a mean value of 0.62, a standard deviation of 0.60 and a negative annual growth rate of 18.71 per cent. In SBI life average quick ratio 0.50 times, a standard deviation of 0.36, and a negative annual growth rate of 18.71 per cent was fined. In Bajaj life average quick ratio 0.54 times, a standard deviation of 0.13, and a negative annual growth rate of 2.27 per cent was fined. In Kotak life average quick ratio 0.81 times, a standard deviation of 0.49, and a negative annual growth rate of 14.88 per cent was fined.

It is concluded that the Reliance has the highest average of 1.83. It shows that the company has maintained a better liquidity position, when compared to other select life insurance companies. The low value of quick ratio may suffer from the shortage of funds.

7.2.6 Expenses Ratio

Commission Paid Ratio

LIC commission expenses increased from 0.06 per cent in 2007-08 to 0.09 per cent in 2010-11, with a mean value of 0.08, a standard deviation of 0.01 and a negative growth rate of 2.27 per cent. Birla paid low commission expenses of 0.07 per cent in 2010-11 and high commission expenses of 0.16 per cent in 2001-02, with a mean value of 0.13, a standard deviation of 0.04 and a negative annual growth of 8.79 per cent. ICICI spent an average commission expenses of 0.07 per cent, a standard deviation of 0.03 and a negative annual growth of 10.87 per cent.

ING spent high commission expenses of 0.32 per cent in 2001-02 and low commission of 0.07 in 2009-10, with a mean value of 0.16, a standard deviation of 0.09 and a negative annual growth of 14.88 per cent. HDFC life spent an average commission of 0.15 per cent, a standard deviation of 0.14 and a high annual growth of 0.69 per cent. MAXNEW recorded an average commission of 0.16 per cent, a standard deviation of 0.06 and negative annual growth of 10.87
per cent. Reliance paid an average commission of 0.13 per cent, a standard deviation of 0.07 and a negative annual growth of 8.79 per cent. TATA spent an average commission expense of 0.14 per cent, a standard deviation of 0.06 and a negative annual growth of 12.90 per cent.

SBI life spent an average commission of 0.05, a standard deviation of 0.02 and a highest annual growth of 14.81 per cent. Bajaj spent average commission expenses of 0.17 per cent, a standard deviation of 0.08 and a negative annual growth of 10.87 per cent. Kotak spent a low commission of 0.04 per cent in 2010-11 and high expenses of 0.24 per cent, with a negative annual growth of 12.90 per cent.

It is concluded that the Bajaj has the highest average commission expenses of 0.17 per cent. It shows that the company gives more commission to the agents. If less commission expenses paid it leads to more profits.

Claims paid Expenses

LIC spent a low claim of 0.33 per cent in 2008-09 and a high claim of 0.55 per cent in 2010-11, with an average claim of 0.40, a standard deviation of 0.06 and a lowest compound growth of 2.32 per cent. Birla’s annual growth increased from 100 per cent to 3400 per cent during the study. It has an average claim of 0.10 per cent, a standard deviation of 0.11 and a compound growth rate of 51.35 per cent. ICICI recorded a highest annual growth of 62.18 per cent, with a mean value of 0.15 per cent.

ING spent an average claim of 0.08 per cent, with a standard deviation of 0.10. HDFC spent an average claim of 0.37 per cent, a standard deviation of 0.97, and there was no compound growth. MAX NEW life claim expenses increased 950 percentages from the base year with an annual growth of 0.07 per cent. Reliance claim increased from 100 per cent to 3000 per cent during the study.

TATA life claim expenses increased 200 percentages from the base year, with an annual growth of 0.07 per cent, a compound growth of 9.64 per cent. Met life found 850 percentages claim base increased from the base year with a mean value of 0.05. SBI life claim expenses 475 percentages increased from the base year with an average claim of 0.08 per cent. Bajaj life spent a highest annual growth of 5100 percentages from the base year. Kotak life claim increased 3400 percentages from the base year.
It is concluded that LIC spent more claim expenses. LIC spent the highest average of 0.40. It shows that LIC has more policies during the study.

Operating expenses Ratio

The operating expenses of the select life insurance companies ratio decreased trend from the year 2001-02 to 2010-11. There is no change in the LIC operating expenses ratio. It has a mean value of 0.07 per cent per year, standard deviation of 0.01, and it recorded a negative growth rate of 2.27 per cent. Birla ratio varies from 1.70 per cent to 0.21 per cent during the study period. It has a mean value of 0.41, a standard deviation of 0.47 and recorded a negative growth rate of 12.90 per cent.

ICICI, ING, HDFC and MAXNEW registered a decreasing trend from the year 2001-02 onwards. ICICI has a mean value of 0.27, a standard deviation of 0.18 and a negative compound growth of 12.90 per cent. ING has a mean value of 1.20, a standard deviation of 1.69 and a negative compound growth of 25.86 per cent. HDFC has a mean value of 0.52, a standard deviation of 0.50 and a negative compound growth of 2.27 per cent. MAXNEW has a mean value of 0.68, a standard deviation of 0.60 and a negative compound growth of 16.80 per cent.

The operating expenses of Reliance, TATA, MET, SBI, Bajaj and Kotak life had a decreasing trend. Reliance recorded a high ratio of 40.11 and a low ratio of 0.24, a mean value of 4.99 per cent per year, a standard deviation of 12.43 and a negative compound growth rate of 39.60 per cent. TATA recorded a high ratio of 1.91 and a low ratio of 0.24, a mean value of 0.34 per cent per year, a standard deviation of 0.51 and a negative compound growth rate of 14.88 per cent. MET recorded a high ratio of 13.60 and a low ratio of 0.22, a mean value of 2.26 per cent per year, a standard deviation of 0.22 and a negative compound growth rate of 33.39 per cent.

SBI recorded a high ratio of 0.71 and a low ratio of 0.07, a mean value of 0.22 per cent per year, a standard deviation of 0.21 and a negative compound growth rate of 20.56 per cent. Bajaj recorded a high ratio of 3.52 and a low ratio of 0.17, a mean value of 0.64 per cent per year, a standard deviation of 1.05 and a negative compound growth rate of 24.14 per cent. Kotak recorded a high ratio of 4.88 and a low ratio of 0.19, a mean value of 0.86 per cent per year, a standard deviation of 1.47 and a negative compound growth rate of 24.14 per cent.
Thus, it has been concluded that the overall operating expenses of management ratio of life insurance companies in India, LIC and HDFC have the highest negative growth of 2.27 per cent per annum. All the private life insurances in the initial stage spend more operating expenses due to negative compound growth rate.

**Operating and Claim Expenses Ratio**

The operating and claim expenses ratio of all the select life insurance companies in India have a decreasing trend that is they reduced their expenses. ING life has a highest compound growth rate of 18.71 per cent, a mean value of 1.28, a standard deviation of 1.65. It record highest a ratio of 5.52 in 2001-02 and a lowest ratio of 0.41 in 2008-09. LIC life has a lowest compound growth rate of 1.62 per cent, a mean value of 0.47, a standard deviation of 0.06. It recorded a highest ratio of 0.63 in 2010-11 and a lowest ratio of 0.43 in 2007-08. Kotak life has a highest negative compound growth rate of 16.82 per cent, a mean value of 0.97, a standard deviation of 1.42. It records a highest ratio of 4.88 in 2001-02 and a lowest ratio of 0.25 in 2008-09.

Thus, it has been concluded that the overall operating expenses and claim expenses of life insurance companies in India, ING has the highest growth of 18.71 per cent per annum.

**Total Expenses Ratio**

Total expenses ratio of life insurance companies in India had a fluctuating trend throughout the study period. LIC recorded a highest negative compound growth rate of 2.27 per cent with a mean value of 0.15, a standard deviation of 0.02. It record a highest expenses ratio of 0.18 in 2001-02, 2002-03 and a lowest ratio of 0.12 in 2008-09 due to well established branches in India in the long run they spend less total expenses compared to other private players in India. Reliance life recorded a lowest negative compound growth rate of 33.93 per cent, with a mean value of 51.21 per cent, a standard deviation of 5.12. It spent a high total expense due to establishment of business in the recent years they not able to control total expenses.

Thus, it has been concluded that the overall total expenses ratio of life insurance companies in India, LIC has the highest negative growth of 2.27 per cent per annum.

**7.2.7 Working Fund Position**
Working Capital Turnover Ratio

The working capital turnover ratio of the select life insurance companies in India had a fluctuating trend throughout study period due to change of its business operation year by year. TATA recorded a highest average working capital of 17418 times from the gross premium, it showed a highest working capital of 225689 times in 2005-06 and a lowest negative working capital of 43220 times in 2004-05. LIC recorded a highest average working capital of 2047 times in 2004-05 and a lowest working capital of 298 times in 2001-02. ING recorded a highest negative average working capital of 5414 times. And MET life recorded a lowest negative average working capital of 524 times from the gross premium. Private players working fund showed negative trend except TATA, HDFC, Reliance and Kotak life because they spent more establishment expenses, operating expenses.

It has been concluded that TATA life maintained a highest average working capital of 17418 times from the gross premium during the study period.

7.2.8 Asset Holding Position

Current Assets Turnover Ratio

The current asset turnover ratio of the select life insurance companies in India considerably increased during the study period. MET life recorded a highest compound growth rate of 65.95 per cent with a mean value of 4.93 times per year, a standard deviation of 4.19. It recorded a highest ratio of 11.40 in 2010-11 and a lowest ratio of 0.41 in 2001-02. Bajaj and Kotak life recorded a highest compound growth rate of 41.25 per cent during the study. It showed a high liquidity position of the companies they have well current assets as compare from the gross premium. LIC recorded a high ratio of 3.72 times in 2006-07 and a lowest ratio of 2.11 times in 2002-03 with a mean value of 3.07, a standard deviation of 0.55 and a compound growth rate of 4.71 per cent. HDFC recorded a lowest compound growth rate of 2.32 per cent, a mean value of 4.46, a standard deviation of 2.44 and HDFC had a high ratio of 9.05 times in 2009-10 and a lowest ratio of 1.37 times in 2001-02. Other private life insurers’ compound growth rate varied from 7.15 per cent to 38.08 per cent. The decreasing ratio indicates less liquidity of the company. They are in a dangerous position.

Thus, it has been concluded that the overall current assets turnover ratio of life insurance companies in India, MET has the highest growth of 65.95 per cent per annum.
**Fixed Assets Turnover Ratio**

The Fixed asset turnover ratio of select life insurance companies in India considerably increased during the study period. During the study Reliance recorded a highest ratio of 808 times in 2010-11 and a lowest ratio of 0.04 times in 2001-02, with average fixed assets of 148 times maintained per year. It showed a highest compound growth rate of 151.18 per cent. It showed a high solvency position of the company because they have a very good establishment of its business. Next highest compound growth rate of ING records 86.20 per cent. It recorded a highest ratio of 177 times in 2010-11 and a lowest ratio of 0.40 times in 2001-02, with an average fixed assets of 40.40 times maintained per year. LIC records a highest ratio of 71.66 times in 2010-11 and a lowest ratio of 51.38 times in 2001-02, with average fixed assets of 64.12 times maintained per year. It showed a lowest compound growth rate of 2.32 per cent because of the already well established and expanded its business from the year 1956 onwards.

Thus, it has been concluded that the overall fixed assets turnover ratio of life insurance companies in India, Reliance has the highest growth of 151.18 per cent per annum.

**7.2.9 Solvency Ratios**

**Return on Equity capital ratio**

Return on equity capital of the life insurance companies in India found that LIC profit from the share capital considerably increased during the study period. LIC recorded a highest profit of 234.36 per cent in 2010-11 and a lowest profit of 99.39 per cent in 2002-03, it has a mean value of 160.37 per cent per year, a standard deviation of 43.43 and a highest compound growth rate of 7.15 per cent. LIC achieved a good profit because of public sector dependability and they collect more policies from the public because of good name from the year 1956 onwards. In private life insurers they introduced more capital but they earned negative profit throughout the study period. They will earn sufficient profit only the long run operation. In private life insurers Bajaj life only earned an average profit of 0.69 per cent per year. ICICI life recorded a highest negative average profit of 0.74 per cent. Its profit fluctuated throughout study. MET life earned a lowest negative average profit of 0.06 per cent, with a standard deviation of 0.13 per cent. Their solvency position is not good because they incurred continuous loss throughout the study.
Return on Assets Ratio

Return on assets of the select life insurance companies in India found that LIC alone earned positive profit from the total assets. LIC recorded a highest ratio of 1.74 in 2008-09. It earned an average profit of 0.99 per cent from the total assets, with a standard deviation of 0.31. it also showed a negative compound growth rate of 6.67 per cent. In private players Reliance life recorded a highest negative average profit of 19.52 per cent from the total assets. Because they have high value of fixed assets. Bajaj life recorded a lowest negative average profit of 0.19 per cent with a mean value of 5.46.

Fixed Assets to Net worth Ratio

Fixed assets to net worth ratio of the select life insurance companies in India found that LIC had the increasing trend during the year 2001-02 to 2010-11. The highest ratio of 9.08 was found in 2003-04 and a lowest ratio of 5.54 in 2009-10. It has a mean value of 7.51, a standard deviation of 1.48 and a negative compound growth rate of 2.27. Private life insurers fixed assets to net worth ratio fluctuated throughout the study period. MET life net worth ratio found a compound growth rate of 4.71 per cent, with a mean value of 0.06 and a standard deviation of 0.03. ING life recorded a highest negative compound growth rate of 20.56 per cent, with a mean value of 0.08 and a standard deviation of 0.04. The highest ratio in net worth shows the highest fixed assets maintained by the life insurers.

7.2.10 Multiple Regressions regarding financial efficiency

LIC: The result of econometric test establishes .875 i.e., 87 per cent of correlation between the variables tested in the case of LIC. The $R^2$ value at .766 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 76.60 per cent influence on the dependent variable gross premium.

Birla life insurance: The result of econometric test establishes .941 i.e., 94 per cent of correlation between the variables tested in the case of BIRLA. The $R^2$ value at .885 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio,
claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 88.50 per cent influence on the dependent variable gross premium.

**ICICI life insurance:** The result of econometric test establishes .926 i.e., 92 per cent of correlation between the variables tested in the case of ICICI. The $R^2$ value at .857 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 85.70 per cent influence on the dependent variable gross premium.

**ING life insurance:** The result of econometric test establishes .951 i.e., 95 per cent of correlation between the variables tested in the case of ING. The $R^2$ value at .905 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 90.50 per cent influence on the dependent variable gross premium.

**HDFC life insurance:** The result of econometric test establishes .924 i.e., 92 per cent of correlation between the variables tested in the case of HDFC. The $R^2$ value at .887 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 88.70 per cent influence on the dependent variable gross premium.
Max New life insurance: The result of econometric test establishes .860 i.e., 86 per cent of correlation between the variables tested in the case of MAX NEW. The $R^2$ value at .740 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 74 per cent influence on the dependent variable gross premium.

Reliance life insurance: The result of econometric test establishes .919 i.e., 91 per cent of correlation between the variables tested in the case of Reliance. The $R^2$ value at .845 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 84.50 per cent influence on the dependent variable gross premium.

TATA life insurance: The result of econometric test establishes .923 i.e., 82 per cent of correlation between the variables tested in the case of TATA. The $R^2$ value at .852 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 85.20 per cent influence on the dependent variable gross premium.

MET life insurance: The result of econometric test establishes .953 i.e., 95 per cent of correlation between the variables tested in the case of MET. The $R^2$ value at .909 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and
ratio of fixed assets to net worth have 90.90 per cent influence on the dependent variable gross premium.

**SBI life insurance:** The result of econometric test establishes .979 i.e., 97 per cent of correlation between the variables tested in the case of SBI. The $R^2$ value at .959 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 95.90 per cent influence on the dependent variable gross premium.

**Bajaj life insurance:** The result of econometric test establishes .845 i.e., 84 per cent of correlation between the variables tested in the case of Bajaj. The $R^2$ value at .714 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 71.40 per cent influence on the dependent variable gross premium.

**Kotak life insurance:** The result of econometric test establishes .426 i.e., 42 per cent of correlation between the variables tested in the case of Kotak. The $R^2$ value at .181 states that all the fourteen independent variables tested i.e., current ratio, quick ratio, commission paid ratio, claim paid out of gross premium, operating expenses of management ratio, operating expenses and claim expenses, net earnings, total expenses ratio, working capital turnover ratio, current assets turnover ratio, fixed assets turnover ratio, return on equity capital, return on assets and ratio of fixed assets to net worth have 18.10 per cent influence on the dependent variable gross premium.

**7.3 CONCLUSION**

Challenges faced by the Life insurance Companies as a whole over the last few years have forced the industry to rethink how they do business on productivity and financial level. That
the entry of private sector life insurance companies has, undoubtedly contributed to the strengthening of life insurance business by creating a competitive atmosphere. From this study, it is clear that the only public sector company LIC presents better efficiency in terms of all productivity level, and financial efficiency, i.e. increasing liquidity and solvency position year by year. Whereas the productivity efficiency of the private life insurance companies in terms of agents productivity, policies productivity and branches productivity ratio increase year by year. It has been highlighted that the financial efficiency of the select private life insurance companies Suffer losses since the private sector was opened in 2000. As any company may normally take seven to 10 years to achieve the break-even point, it is a good sign that there companies are at the brink of achieving their break-even point. ICICI Prudential life, MAXNEW YORK life and BAJAJ ALLIANZ life have started earning their profit from ninth year of operation. The other private life insurance companies will achieve the same in the near future, as they have trying to improve their liquidity position, solvency position, profit and asset position.
7.4 SUGGESTIONS

1. In order to increase the liquidity level the life insurance companies should maintain a minimum working fund.

2. The private insurers can increase the position of solvency by restricting their capital portfolio.

3. The productivity level of Reliance life, ING life, and TATA life insurance companies may be augmented in the event of their regulating the renewal premium of their policyholders.

4. On selling the right policy to the right policyholders the commission expenses of the private life insurance companies will increase paving the way for saving their losses considerably.

5. By strictly following the rules and regulations framed by IRDA regarding operating expenses the insurance companies can improve their profit.

6. The life insurance companies should maintain a balanced investment in order to meet the future risks.

7. A basic training to the agents in day-to-day market technology will boost their productivity and branch productivity as well as the knowledge to handle the problems linked with their business.

7.5 SCOPE FOR FURTHER STUDY

This study has been carried out on only the productivity and financial efficiency of select life insurance companies in India. There is still scope for further study in

a) Capital structure of life Insurance companies in India.

b) Determinants of Dividend policy of Life Insurance Companies in India.