

Chapter 6: Financial Soundness of Life Insurers

6.1 Financial Performance

6.2 CARAMELS Framework

6.3. Financial Position of Individual Life Insurance Firms

6.4 Ranking based on Financial Performance

6.1 FINANCIAL PERFORMANCE

The performance measurement is an effective control mechanism for any firm. The financial position of a firm depicts the soundness with which it is operating its business. Insurance sector is one of the prime sectors in the financial system of a country. The life insurance sector has remarkable contribution to the growth of the country with special mention to Life Insurance Corporation of India. Such apex institutions serve as the backbone for a country. The financial soundness of these individual players reflects the growth of the country. The individual firms therefore try their utmost to keep proper check on the financial performance of the firm. The balance sheet and the profit and loss statement are the two major sources for evaluating financial performance. The insurance companies prepare shareholders account, policy holders' account and balance sheet for this purpose. The Government maintains their vigil on the individual players through Insurance Regulatory and Development Authority (IRDA). IRDA has made it mandatory for the insurance firm to disclose all relevant information for the benefit of the public at large. Solvency ratio is calculated and disclosed as a measure of financial strength.

Insurance penetration and Insurance density are the prime parameters used throughout the globe. All these measures are based on ratio analysis. So, ratio analysis has been accepted as a strong analytical and control mechanism without any qualm. Many researches are undergoing based on these parameters. A number of new methods have been developed for judging the performance of a firm based on the earlier literature. International monetary fund (IMF) has recommended certain indicators to understand the stability and financial prudence of the financial sector at large and individual entities specifically for different types of financial institutions viz. banks, insurance companies, non-banking finance companies etc. These indicators are termed as Financial Soundness Indicators (FSIs). FSIs in turn provide important input for Financial Stability Assessments (FSAs). FSAs are used for drawing broad policies and as a control mechanism.

CAMELS Framework is a renowned ratio based analytical tool suggested for the banking sector. The acronym CAMELS stands for **C**apital adequacy, **A**sset quality, **M**anagement Soundness, **E**arnings and Profitability, **L**iquidity and **S**ensitivity to Risk. For the insurance sector, it is known as CARAMELS framework (i.e. **C**apital Adequacy, **A**sset Quality, **R**einsurance and **A**ctuarial Issues, **M**anagement Soundness, **E**arnings and Profitability, **L**iquidity and **S**ensitivity to Risk).

6.2 CARAMELS FRAMEWORK

The different Financial Soundness Indicators (FSIs) covered in the CARAMELS framework have been discussed below. The various aspects that are studied in this model are Capital Adequacy,

Asset Quality, Reinsurance and Actuarial Issues, Management Soundness, Earnings and Profitability, Liquidity and Sensitivity to Risk.

The financial stability and soundness of an insurance sector and the individual insurers has been analyzed using the CAMELS framework as recommended by Das, Davies and Podpiera of the IMF (2003). The proposed FSIs have been classified into two sets on the basis of importance, necessity and data availability. The two broad categories are:

(i) **Core set of Indicators** are for regular monitoring of insurance companies. Thus, it covers those aspects for which data are readily available and are of vital importance for an insurance company, and

(ii) **Encouraged set of indicators** which are optional to the industry and computation of which depends upon the availability of data. So, they are of less importance compared to the former.

It should be mentioned here that they have included certain ratios in the two categories, but they have also kept the list open-ended in order to help and adjust with the data disclosure practices in conversant with different countries. So, for determining the ratios to be considered for measuring financial soundness, the overall industry disclosure practices should be taken into consideration with due priority.

(i)Core Set of Indicators

This list of ratios helps in understanding the financial soundness of the insurers. A continuous monitoring of this set of indicators is extremely crucial in order to adopt corrective actions, as and when required. A detailed list of indicators under this category is given in table below:

Table 6.1:Core Set of FSIs for a Life Insurance Industry

Indicators	Sub-Indicators
Capital Adequacy	Net Premium/Capital, Capital/ Total Assets, Capital/Technical Reserves
Asset Quality	(Real Estate + Unquoted Equities+ Debtors)/ Total Assets, Debtors/ (Gross Premium + Reinsurance Recoveries), Equities/Total Assets, Non-performing Loans to Total Gross Loans, Investment Income/ Net premiums

Reinsurance and Actuarial Issues	Risk Retention Ratio (i.e, Net Premiums / Gross Premiums), Net Technical Reserves/Average of Net Claims paid in last three years, Net Technical Reserves/Average of net Premium Received in last three years
Management Soundness	Gross Premium/Number of Employees, Assets per Employee (Total Assets/ Number of employees)
Earnings and Profitability	Loss Ratio (Net Claims/Net Premium), Expense Ratio (Expenses/Net Premium), Combined Ratio = Loss Ratio + Expense Ratio, Revisions to Technical Reserves/ Technical Reserves, Investment Income/ Investment Assets, Return on Equity (ROE), Liquidity Assets/Current Liabilities
Liquidity	Net Open Foreign Exchange position/ Capital
Sensitivity to market Risk	Duration of Assets and Liabilities, Net open foreign exchange position/Capital. Sensitivity to market

Source: Das, Davies and Podpiera (2003)

(ii) Encouraged Set of Indicators

According to the three researchers of IMF, the ratios falling under this category are not to be computed compulsorily. Instead, their calculation is desirable depending on disclosure of relevant data by the insurers. The table below gives the list of ratios that come under this category.

Table 6.2: Encouraged Set of FSIs for a Life Insurance Industry

Indicator	Sub-Indicators
Capital Adequacy	Cover of Solvency Margin, Risk-based capital adequacy ratios
Asset Quality	Asset/liability position in financial derivatives to total capital, Investments; geographical distribution, Investments; sector
Reinsurance and	Underwritten business; geographical distribution, Underwritten business; sector distribution, Underwritten business; distribution by
Management	Operating Expenses/ Gross Premium, Personal Expenses/ Gross Premium
Earnings and Profitability	Earning per Employee (Net Profit/ Number of employees), Return on Assets, Return on Revenue
Liquidity	Liquid Assets/ Total Assets, Liquid Liabilities/ Total Liabilities

Market based	Market/Book value, Price/Earnings Ratio, Price/Gross Premium
Group Exposure	Group Debtors/Total Assets, Group premium claims/Total of

Source: Das, Davies and Podpiera (2003)

The relevance of ratios is subjective in nature. The authors mentioned that the indicators may differ from one country to another. The availability of data and financial environment of the country should be the driving factor while deciding on the indicators and their importance.

Basis for analysis of Individual Companies

The information for calculating core set of FSIs should be available from the published reports, but under Indian reporting practice some of the required information could not be traced for computing the absolute ratios. Those were neither available in the IRDA Annual Reports nor the private life insurers reports. Hence, we could not compute all the ratios mentioned in the framework as it is.

Keeping the broader aspects in mind the ratios which have been considered for the study are fulfilling the requirement of the major indicators. The ratios that have been considered for study within CAMELS framework are as follows:

- (i) For measuring Capital Adequacy: Net Premium / Capital (NP to Capital)
- (ii) For measuring Asset Quality: Investment Income / Net Premium (II to NP)
- (iii) For measuring Reinsurance / Risk Retention and Actuarial issues: Net Premium / Gross Premium (NP to GP)
- (iv) Management Soundness: Operating Expenses / Gross Premium (OE to GP) Commission / Net Premium (Comm. to NP)
- (v) For measuring Earnings and Profitability: Investment Income / Investment Assets (II to IA)
- (vi) For measuring Liquidity: Liquid Assets / Total Assets (LA to TA) Current Assets / Current Liabilities (CA to CL) Liquid Liabilities / Total Liabilities (LL to TL)

For measuring sensitivity to risk - ratios could not be computed due to non-availability of necessary information in the Annual Reports explaining those ratios.

A very brief discussion about the different ratios calculated is given below:

Net Premium to Capital:

This ratio measures capital adequacy of life insurance firms. It determines how effectively the capital has been utilised for the purpose of generating net premium. Higher is the ratio, better is the position. It, therefore, focuses on the capital utilization effectiveness of an insurer.

Investment Income to Net Premium:

The ratio tells how many times the investment income is to the net premium. It is important to mention here that if we go through the revenue account (also known as the policy holders' statement), we see that the investment income in the case of an insurance business includes not just the interest and dividends but also the profits or losses arising on sale of investments and the gain or loss arising out of revaluation of assets and liabilities. It is a measure of the asset quality of life insurers and is a measure of their portfolio quality. Higher is the ratio, better is the ranking.

Net Premium to Gross Premium:

It is a measure of risk-retention by an insurer. In other words, the value of this ratio reflects the extent of re-insurance done by the insurer.

$$\text{Net Premium} = \text{Gross Premium} + \text{Reinsurance Accepted} - \text{Reinsurance Ceded Operating Expenses to Gross Premium}$$

This is one of the measures of management soundness. It determines the percentage of gross premium that goes towards meeting the operating expenses of an insurer. Lower is the ratio, better is the management efficiency and therefore better is the ranking.

Commission to Net Premium:

It is another measure to determine the effectiveness of product distribution management which shows the percentage of net premium collection that goes towards meeting commission expenses of the insurer. Lower is the ratio, better it is because it implies a lower cost ratio. The ratio indirectly measures how effectively the distribution channels have been managed by the insurers.

Investment Income to Investment Assets:

The ratio measures the investment yield. In other words, it measures the return obtained from investment assets – of both policyholders and shareholders. The investment income is the sum total of investment income from the investments of both policyholders and shareholders, the figures for which are obtained from the respective statements. For the calculation of investment assets, the average of opening and closing balance of investments is used. Since, it is an income ratio, it implies higher is the ratio, better is the ranking.

Liquid Assets (or Current Assets) to Total Assets:

This is a measure of the liquidity of an insurer. It determines the percentage of total assets that are held by an insurer in the form of liquid assets (which includes cash and advances). It is an important ratio because it determines the preparedness of an insurer to meet its short-term liabilities. Higher is the ratio, better is the liquidity position from the view point of the policy holders, and thereby better is the ranking.

Current Assets to Current Liabilities:

It is a traditional measure of liquidity which gives an idea about the matching between short-term assets and liabilities. The value of current liabilities for the purpose of this ratio equals the sum of current liabilities and provisions. It is already known to us from the basics of finance that too much of liquidity is not good as it affects profitability. However, for an insurance business, it is always good to have a moderate level of liquidity so that sudden liabilities in the form of death or surrender claims can be easily paid to the claimant. It is to be remembered that the reputation of any insurance company depends a lot on its claims settlement ratio and the pace with which it settles its claims. Therefore, higher is the ratio, better is the insurer's ranking.

Liquid Liabilities to Total Liabilities:

The above ratio is a measure of the percentage of liquid liability to that of total liability. It must be noted that asset-liability management is very important in any form of business. It is the expertise of a finance manager of any insurance company to plan in such a way that it matches the assets with liabilities to the extent possible. In other words, the insurance company should be in a position to meet its long-term and short-term liabilities with ease which is possible only if commensurate amount of assets are maintained. Hence, it is important not just to look at the liquid asset and liquid liability ratio in isolation, but also to study the trend in the

direction of their movement. With regard to this ratio, lower is the value, better is the situation. A simple reason is that if the ratio is high, it implies higher amount of assets would be required which will affect the company's profitability.

6.3 FINANCIAL POSITION OF LIFE INSURANCE FIRMS

The financial position of the life insurers has been discussed in this section. The ratios mentioned above has been calculated and depicted in the form of a table. The financial soundness covering various aspects of various life insurers has been judged individually. The study has mainly concentrated on the period 2007-08 to 2015-16. However, the study has also revealed the ratios for the private sector companies since inception for better understanding of their financial position. The life insurers have been arranged in an alphabetical manner, as follows:

6.3. I Aviva Life Insurance

The ratios that were calculated in respect of Aviva Life Insurance are given below:

Table 6.3a: Ratios for Aviva Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.992	1.325	0.077	0.388	0.036	0.041	0.684	(0.832)	(0.182)
2009-10	0.993	1.250	0.067	0.299	0.044	0.036	1	3	0.596
2010-11	0.998	4.24	0.058	0.379	0.545	0.96	0.875	0.235	0.839
2011-12	0.987	2.60	0.035	0.310	0.014	0.941	0.399	0.011	0.051
2012-13	0.979	2.64	0.044	0.334	0.610	0.946	0.474	0.007	0.033
2013-14	0.968	0.848	0.042	0.414	0.570	0.962	0.398	0.109	0.613
2014-15	0.964	0.618	0.041	0.305	0.748	0.966	0.547	0.092	0.454
2015-16	0.956	0.361	0.036	0.309	0.816	0.954	0.351	0.027	0.179
2016-17	0.948	0.992	0.025	0.332	0.785	0.971	0.346	0.014	0.839
2017-18	0.518	0.569	0.046	0.332	0.594	0.963	0.371	0.162	1.767

Source:calculated

Table 6.3b : Ratios for Aviva Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	0.994	0.086	0.157	3.594	0.078	0.073	0.857	0.105	0.86
2002-03	0.995	0.334	0.239	1.221	0.137	0.071	1.331	0.163	0.239
2003-04	0.988	0.783	0.183	0.567	0.168	0.092	1.243	0.171	0.083
2004-05	0.994	1.301	0.173	0.425	0.094	0.125	0.562	0.683	0.18
2005-06	0.993	1.504	0.157	0.373	0.110	0.086	1.026	0.402	0.091
2006-07	0.992	1.877	0.116	0.356	0.100	0.080	1.032	0.561	0.091

Source:calculated

Inferences:

i. Re-insurance: Net premium to gross premium - the risk retention was higher in year 2010-2011. So, overall it can be said that in aspect of risk retention, almost the entire risk is covered by the life insurer without going for re-insurance. The ratio has a value of one (or close to one) in all, but one. In 2004-05, the risk-retention percentage went down to 98.8%.In 2017-18 it reveals very alarming situation which needs serious attention.

ii. Capital Utilisation Efficiency: Net premium to capital - the ratio has been increasing which shows the greater utility efficiency of capital. The capital utilisation efficiency is found to be improving over time. It is evident that with an increase in the managerial experience in the industry along with the expansion of distribution network, the capital has been put to use more effectively.

iii. Management Soundness- Commission to net premium - the expenses ratio has been found decreasing which is better for firm's management efficiency ratio. In terms of management soundness, the first factor that has been studied is the commission to net premium ratio. The overall trend is very positive for the company. The distribution management is an area of strength for the insurer.

iv. Operating expenses to gross premium - the performance of ratios decreased year by year. Huge amount of operating expenses are incurred by insurers in the initial years of their business. The OE to GP ratio showed a positive trend for the insurer during the period of its business.

Liquidity:

v. Liquid asset - liquid assets ratio indicates a fall in 2011-2012 which states that the company will not stand with any fall in balances.

vi. Liquid liabilities - the liquid ratios of aviva life insurance was low in 2015-2016

vii. Current liabilities - the liability of firm increased 0.875% in the year 2010-2011 & fall to 0.345% in the year 2016-2017.

Overall, it reveals that asset-liability management was good as the direction of movement of the two is the same. Hence, when the liquid liabilities increased, the liquid assets also went up or down accordingly. The third ratio that was studied is the current ratio where during the initial years, it showed an increase

viii. Profitability: Investment income to investment asset - the ratios increased in the year 2013-2014 i.e 0.109%. In this case a wide variation was observed. Hence, portfolio management is an issue to be handled properly by the insurer.

ix. Investment income to Net Premium - the ratios increased in 2017-2018 which is good for firm. , the trend was optimistic for the insurer. Perhaps if more investments are made in debt securities, the fluctuation will come down.

6.3.II Bajaj Life Insurance Company Limited

The trends observed from the different financial ratios of Bajaj Allianz Life Insurance are as follows:

Table 6.4a: Ratios for Bajaj Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.999	64.442	0.154	0.206	0.036	0.072	0.485	0.345	0.074
2008-09	0.998	70.341	0.099	0.177	0.030	0.046	0.632	(1.097)	(0.295)
2009-10	0.998	75.58	0.085	0.155	0.016	0.033	0.474	2.480	0.881
2010-11	3.653	1.075	0.133	1.357	0.307	0.600	1.068	0.023	0.488
2011-12	1.243	1.026	0.140	0.409	0.187	0.043	0.407	0.019	0.560
2012-13	1.332	1.181	0.051	0.555	0.024	0.047	0.436	0.019	0.573
2013-14	1.435	1.211	0.066	3.570	0.172	0.157	1.000	0.018	0.634
2014-15	1.499	1.312	0.103	4.892	0.370	0.154	1.000	0.019	0.786
2015-16	1.591	1.330	0.117	6.792	0.216	0.042	0.354	0.023	1.076
2016-17	1.612	1.505	0.103	5.538	0.472	0.035	0.292	0.025	1.306
2017-18	1.715	1.600	0.058	7.918	0.413	0.167	0.089	0.110	1.560

Table 6.4b : Ratios for Bajaj Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	0.985	0.047	0.334	3.517	0.133	0.098	1.233	0.092	1.479
2002-03	0.992	0.460	0.181	0.965	0.138	0.105	1.108	0.111	0.224
2003-04	0.993	1.467	0.230	0.600	0.190	0.13	1.119	0.093	0.083
2004-05	0.996	6.664	0.146	0.214	0.114	0.132	0.792	0.057	0.017
2005-06	0.998	20.823	0.109	0.155	0.100	0.100	0.944	0.074	0.013
2006-07	0.998	35.48	0.177	0.201	0.069	0.108	0.617	0.264	0.057

Inferences:

i. Re-insurance: Net premium to gross premium - the risk retention was higher in year 2010-2011. So, overall it can be said that in aspect of risk retention, almost the entire risk is covered by the life insurer without going for re-insurance. In 2017-18, it has maintained the same earlier trend.

ii. Capital Utilisation Efficiency: Net premium to capital - the ratio has been increasing which shows the greater utility efficiency of capital till the end of the year 2010 but it has fallen down drastically in the year 2010-11 and continued similar position. The reason behind this abrupt change may be fall in the demand for ULIP policies due to a bullish trend in the share market.

iii. Management Effectiveness: Commission to net premium - the expenses ratio has been found decreasing which is better for firm's management efficiency ratio. The overall trend is very positive for the company. The distribution management is an area of strength for the insurer. The year 2015-16 reflected highest commission as compared to premium which has been recovered in the later years.

iv. Operating expenses to gross premium- the performance of ratios decreased year by year in the initial part but gradually it has started to increase which is not a very good situation for the company. Huge amount of operating expenses are incurred by insurers in the initial years of their business. The OE to GP ratio does not show showed a healthy trend for the insurer during the period of study.

Liquidity:

v. Liquid asset to liquid liabilities- liquid assets ratio indicates moderate position which allows the company will not stand with any fall in balances.

vi. Liquid liabilities to total liabilities – In cohesion to the the earlier ratio the liquid liabilities are also low compared to total liabilities which is a healthy symptom.

vii. Current assets to current liabilities – there has been continuous ups and down in this ratio. The current asset of the firm is at times very low in terms of current assets. Only in the year 2014-15 and 2015-16 it was perfect.

Overall it may be said that asset-liability management was fair as the direction of liquid assets and liquid liabilities movement was almost same. However, the third ratio is not very satisfactory and sometimes is much below expectation

Profitability:

viii. Investment in asset - the ratios was not at all satisfactory in the initial years but later it has increased gradually and the in 2016-17 it is around 11% which is satisfactory. But, portfolio management needs a lot of attention.

ix. Investment in income - the ratios increased since last three years which is commendable. So, the trend was optimistic for the insurer. Perhaps if more investments are made, it will increase the fund base of the insurer.

6.3.III Bharti AXA Life Insurance

The financial ratios of the company are depicted as under:

Table 6.5: Ratios for Bajaj Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2006-07	0.998	0.052	0.072	11.069	0.127	0.163	0.509	0.050	0.747
2007-08	0.998	0.323	0.107	2.491	0.150	0.164	0.456	0.055	0.068
2008-09	0.997	0.538	0.108	1.570	0.261	0.122	0.842	(0.125)	(0.051)
2009-10	0.997	0.590	0.095	0.986	0.127	0.071	0.841	1.610	0.305
2010-11	56.089	29.123	8.877	75.946	1.102	4.006	109.494	15.576	34.216
2011-12	63.872	80.260	0.755	32.760	3.425	31.366	34.783	1.222	2.329
2012-13	72.748	104.836	2.459	29.226	1.999	34.831	20.074	7.993	13.384
2013-14	76.794	111.914	3.194	28.053	2.254	40.027	19.764	8.086	14.579
2014-15	82.621	97.188	2.478	32.514	1.313	43.801	18.686	8.514	17.429

2015-16	90.882	73.704	2.823	9.365	1.008	45.232	16.013	8.085	19.834
2016-17	86.660	70.233	3.436	37.779	1.293	45.390	15.220	8.725	22.004
2017-18	71.799	55.375	1.835	31.141	1.147	48.731	23.402	6.137	22.397

Source:calculated

Inferences:

i.Re-insurance:Net premium to gross premium - From the year 2010-2011 there is continuous increase in the ratio but after the year 2016-17 there is a continuous fall in the ratios which indicates risk retention of the company has gone down.Overall it can be said that in aspect of risk retention, almost the entire risk is covered by the life insurer without going for re-insurance.

ii. Capital Utilisation Efficiency:Net premium to capital - From the year 2010-2011 there is continuous increase in the ratio but after the year 2014-15 there is a continuous fall in the ratios which poses a threat to it's position and should be addressed at the earliest.

iii. Management Effectiveness: Commision to net premium - From the year 2010-2011 there is cin the ratio that can be seen which generally indicates that the management efficiency ratio of the company, since lower ratio means company is performing better. It is necessary for the management to take adequate measures so that commission ratio can be effectively brought down.

iv. Operating expenses to gross premium- = From the year 2010-2011 there is continuous increase and decrease in the ratio which generally indicates that the management efficiency ratio of the company, since lower ratio means company is performing better.

Liquidity:

v. Liquid asset to liquid liabilities- From the year 2010-2011 there are increases and decreases in the ratio, but the changes in the ratio is between 1 to 2 percent.A moderate ratio is ideal for the company.

vi. Liquid liabilities to total liabilities – From the year 2010-2011 there is a continuous rise in the ratio. A moderate ratio should be appreciated.

vii. Current assets to current liabilities – From the year 2010-2011 there is continuous decline in the ratio but in the year 2017-18 there is a rise in the ratio.

Profitability:

viii. Investment income to investment asset - These type of ratio generally indicates the profitability ratio of the company. From the year 2010-11 there is increase and decrease in the ratio that can be seen. Generally, here higher the ratio the higher will be the profit of the company and vice-versa.

ix. Investment income to net premium - These type of ratio generally indicates the profitability ratio of the company. From the year 2010-11 there is continuous fall in the ratio that can be seen, which cannot be appreciated.

6.3.IV Birla Sun Life Insurance Company Limited

The ratios are enumerated as under:

Table 6.6a: Ratios for Birla Sun Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.990	2.529	0.104	0.206	0.065	0.068	0.852	1.049	0.158
2008-09	0.988	2.403	0.107	0.273	0.063	0.067	0.815	(0.811)	(0.141)
2009-10	0.985	2.755	0.095	0.241	0.041	0.045	0.819	3.183	0.743
2010-11	0.985	2.284	0.068	0.212	0.274	0.058	11.111	29.520	0.267
2011-12	0.980	2.302	0.070	0.201	0.282	0.052	11.219	28.327	0.280
2012-13	0.998	2.267	0.071	0.215	0.296	0.052	11.167	29.247	0.260
2013-14	1.001	2.248	0.071	0.201	0.282	0.056	10.702	29.256	0.268
2014-15	0.987	2.314	0.069	0.223	0.293	0.053	10.847	30.457	0.290
2015-16	1.011	2.242	0.066	0.233	0.289	0.052	10.660	28.988	0.278
2016-17	0.978	2.287	0.069	0.202	0.272	0.054	11.146	29.547	0.299

Source: calculated

Table 6.6b : Ratios for Birla Sun Life Insurance Company Limited

Year	Net premium	Net premium to capital	Commission to net premium	Operating expenses	Liquid assets to	Liquid liabilities to	Current asset to	Investment income to	Investment income to
------	-------------	------------------------	---------------------------	--------------------	------------------	-----------------------	------------------	----------------------	----------------------

	to gross premium			to gross premium	total assets	total liabilities	current liabilities	investment asset	net premium
2001-02	0.948	0.180	0.164	1.704	0.105	0.138	0.590	0.518	1.916
2002-03	0.972	0.777	0.211	0.619	0.142	0.147	0.666	0.120	0.075
2003-04	0.986	1.827	0.147	0.269	0.092	0.090	0.731	0.182	0.036
2004-05	0.985	2.576	0.143	0.194	0.052	0.072	0.622	0.380	0.063
2005-06	0.983	2.682	0.129	0.194	0.044	0.061	0.659	0.754	0.273
2006-07	0.982	2.584	0.116	0.213	0.056	0.071	0.715	0.668	0.121

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - the risk retention was higher in year 2015-2016.

ii. Capital Utilisation Efficiency : Net premium to capital - the ratio has been increasing which shows the greater utility efficiency of capital.

iii. Management Effectiveness: Commission to net premium - the expenses ratio has been found decreasing which is better for firm's management efficiency ratio.

iv. Operating expenses to gross premium- = The ratios increased year by year. So, the performance is not satisfactory.

Liquidity:

v. Liquid asset to liquid liabilities- This ratio was stable through out the period which is a good sign.

vi. Liquid liabilities to total liabilities – This ratio has very minimal fluctuations throughout the period.

vii. Current assets to current liabilities – The current ratio drastically increased from the year 2010-11 which is a positive sign for the company.

Profitability:

viii. Investment income to investment asset - These type of ratio generally indicates the profitability ratio of the company. In 2008-09 there is a negative growth which is not good but later it recovered. It

had to never look back after 2010-11 as there is huge increase in the ratio and which has been steadily maintained thereafter.

ix. Investment income to net premium - These type of ratio generally indicates the profitability ratio of the company. A low ratio means the company is more dependent on it's premium income than on investment.

6.3.V. Exide Life Insurance Company Limited

The financial performance of Exide, formerly known as ING Vysya Life Insurance Company is given below:

Table 6.7a: Ratios for Exide (ING) Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.995	1.460	0.092	0.348	0.095	0.083	0.879	0.187	0.128
2008-09	0.995	1.408	0.077	0.322	0.099	0.078	0.976	(3.120)	(0.211)
2009-10	0.998	1.608	0.074	0.284	0.046	0.046	0.831	0.802	0.63
2010-11	0.776	1.167	0.076	0.225	0.118	0.019	0.978	0.197	0.007
2011-12	0.904	1.146	0.065	0.259	0.100	0.009	1.083	0.333	0.012
2012-13	0.859	1.188	0.067	0.235	0.086	0.022	1.384	0.531	0.020
2013-14	0.715	1.144	0.072	0.190	0.071	0.006	1.410	0.504	0.021
2014-15	0.643	1.159	0.062	0.165	0.085	0.013	1.590	0.719	0.031
2015-16	0.697	0.9	0.074	0.210	0.139	0.004	1.623	0.727	0.043
2016-17	0.240	0.325	0.178	0.216	0.116	0.022	1.440	0.744	0.157

Surce: calculated

Table 6.7b: Ratios for Exide (ING) Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	0.995	0.038	0.324	5.518	0.096	0.123	0.594	0.103	1.94
2002-03	0.998	0.125	0.305	2.729	0.230	0.111	1.366	0.126	0.484
2003-04	0.998	0.361	0.226	1.118	0.393	0.099	2.397	0.179	1.156

2004-05	0.996	1.040	0.122	0.432	0.365	0.227	1.202	0.059	0.028
2005-06	0.994	0.863	0.163	0.496	0.163	0.141	0.833	0.170	0.139
2006-07	0.996	1.020	0.134	0.429	0.100	0.118	0.628	0.129	0.105

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - There is a gradual increase and decrease of the net premium. From 2016-2017, there is a gradual fall in the net premium.

ii. Capital Utilisation Efficiency : Net premium to capital - There is a gradual increase in capital. It has been increasing till 2014, and then it has remained constant from 2015 onwards.

iii. Management Effectiveness: Commission to net premium - There is a gradual change in the commission of expense. It has been falling from 2014 onwards.

iv. Operating expenses to gross premium - = There is not much change in the operating expenses, but there has been an increase and decrease over the years. There are very slight changes over the years.

Liquidity:

v. Liquid asset to liquid liabilities - There has been change in the liquid asset of the company. In some years it is increasing and in some years it has been decreasing.

vi. Liquid liabilities to total liabilities – The company has very minimum liquid liabilities which signifies less chances of sudden flow of fund.

vii. Current assets to current liabilities – The current ratio drastically increased from the year 2010-11 which is a positive sign for the company. The ratio is more than 1 from last few years.

Profitability:

viii. Investment income to investment asset - The investment income has been increasing over the years.

ix. Investment income to net premium – The investment income is very less compared to the net premium .

6.3.VI Future Generali Life Insurance Company Limited

The different ratios are depicted as under:

Table 6.8: Ratios for Future Generali Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	1	0.003	0.072	13.291	0.129	0.075	1.532	0.040	9.193
2008-09	1	0.316	0.149	1.782	0.153	0.115	0.783	0.094	0.100
2009-10	1	0.762	0.242	0.815	0.163	0.080	1.066	0.272	0.121
2010-11	0.926	1.429	0.080	0.249	0.675	0.951	0.562	0.452	0.011
2011-12	0.966	1.273	0.035	0.217	0.749	0.946	0.688	0.529	0.017
2012-13	0.958	1.359	0.044	0.198	0.636	0.959	0.807	0.779	0.026
2013-14	0.952	1.207	0.050	0.224	0.480	0.938	0.934	0.971	0.040
2014-15	0.946	1.113	0.057	0.229	0.415	0.964	0.426	1.219	0.059
2015-16	0.947	1.223	0.056	0.232	0.336	0.966	0.300	1.238	0.064
2016-17	0.946	1.405	0.057	0.247	0.376	0.971	1.029	1.486	0.071
2017-18	0.947	1.608	0.056	0.219	0.282	0.970	0.347	1.751	0.082

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicates that there is very less dependence on reinsurance.

ii. Capital Utilisation Efficiency : Net premium to capital - There is a drastic increase in the ratio since 2010-11 and the ratio is good enough for the company.

iii. Management Effectiveness: Commission to net premium – The ratio is quite low which resembles that the cost management was very effective.

iv. Operating expenses to gross premium – The ratio is very satisfactory as the operating expenses are very less as compared to gross premium.

Liquidity:

v. Liquid asset to liquid liabilities- The proportion of liquid assets in total assets of the firm has been decreasing gradually which may pose threat to the liquidity.

vi. Liquid liabilities to total liabilities – The company has very high proportion of liquid liability in the total liability of the firm

vii. Current assets to current liabilities – The decreased gradually in all the years and drastically in 2016-17 which is not a very good sign.

Profitability:

viii. Investment income to investment asset - The investment income has been increasing over the years.

ix. Investment income to net premium – The investment income is very less compared to the net premium .

6.3.VII HDFC Life Insurance Company Limited

The financial position over the years is reflected below:

Table 6.9a: Ratios for HDFC Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.792	0.992	0.073	0.208	0.089	0.060	1.372	0.252	0.122
2008-09	0.073	0.992	0.077	0.316	0.083	0.072	1.056	(0.547)	(0.306)
2009-10	0.534	0.993	0.076	0.215	0.036	0.055	0.621	1.368	0.828
2010-11	0.99	3.53	0.08	0.22	0.01	0.94	1.39	0.29	0.83
2011-12	0.99	4.04	0.05	0.17	0.01	0.87	0.81	0.55	1.25
2012-13	0.99	4.59	0.06	0.12	0.02	0.65	0.86	0.43	1.02
2013-14	1.00	5.65	0.06	0.12	0.004	1.24	0.78	1.11	3.24

2014-15	0.99	5.41	0.04	0.12	0.003	1.32	0.98	1.33	3.71
2015-16	1.00	5.70	0.04	0.10	0.010	0.38	0.90	0.98	0.83
2016-17	0.99	5.12	0.04	0.11	0.001	0.56	0.75	0.02	0.11

Source: calculated

Table 6.9b: Ratios for HDFC Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	0.958	0.193	0.206	1.233	0.131	0.071	1.611	0.211	0.795
2002-03	0.968	0.665	0.137	0.469	0.170	0.078	1.766	0.106	0.128
2003-04	0.973	1.139	0.134	0.330	0.148	0.066	1.910	0.139	0.153
2004-05	0.98	2.109	0.109	0.254	0.105	0.6	1.048	0.066	0.054
2005-06	0.985	2.498	0.078	0.202	0.131	0.082	1.440	0.382	0.248
2006-07	0.996	1.020	0.134	0.202	0.99	0.067	1.364	0.152	0.087

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicates that there is very less dependence on reinsurance except three years year ending 2008, 2009 and 2010.

ii. Capital Utilisation Efficiency : Net premium to capital - There is a drastic increase in the ratio since 2010-11 and the ratio is favourable for the company.

iii. Management Effectiveness: Commission to net premium – The ratio is quite low which resembles that the cost management was very effective.

iv. Operating expenses to gross premium – The ratio is very satisfactory as the operating expenses are very less as compared to gross premium.

Liquidity:

v. Liquid asset to liquid liabilities- The proportion of liquid assets in total assets of the firm has been decreasing gradually and has become almost nil in recent years. This will pose threat to the liquidity of the firm.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm is very low.

vii. Current assets to current liabilities – The ratio decreased gradually in all the years after 2010-11 so utmost attention should be given to the liquidity position of the firm

Profitability:

viii. Investment income to investment asset - The investment income has been decreasing over the years.

ix. Investment income to net premium – The ratio was satisfactory from 2010-11 to 2014-15 but is seen to fall after that.

6.3.VIII ICICI Prudential Life Insurance Company Limited

The ratios for ICICI Prudential Life Insurance Company is as follows

Table 6.10a: Ratios of ICICI Prudential Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.998	0.097	0.060	0.215	0.157	0.101	0.666	0.139	0.216
2008-09	0.998	0.107	0.046	0.178	0.109	0.690	0.635	-0.093	-0.401
2009-10	0.997	0.115	0.036	0.155	0.578	0.959	0.383	0.137	1.067
2010-11	0.996	0.125	0.031	0.122	0.842	0.141	0.424	0.032	0.350
2011-12	0.993	0.097	0.043	0.143	0.088	0.104	0.578	0.00002	-0.010
2012-13	0.991	0.094	0.057	0.151	0.126	1.000	0.798	0.004	0.461
2013-14	0.988	0.086	0.050	0.155	0.235	0.667	0.720	0.005	0.750
2014-15	0.990	0.106	0.036	0.128	0.668	0.532	0.837	0.008	1.235
2015-16	0.991	0.133	0.032	0.117	0.083	0.731	0.832	0.00005	0.001

2016-17	0.991	0.154	0.034	0.124	0.652	0.616	0.846	0.00004	0.007
---------	-------	-------	-------	-------	-------	-------	-------	---------	-------

Source: calculated

Table 6.10b: Ratios of ICICI Prudential Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	0.999	0.612	0.124	0.729	0.093	0.077	0.827	0.162	0.213
2002-03	0.999	0.982	0.090	0.416	0.070	0.069	0.748	0.115	0.088
2003-04	0.998	1.462	0.097	0.290	0.054	0.072	0.592	0.101	0.064
2004-05	0.998	2.551	0.075	0.195	0.054	0.081	0.699	0.213	0.086
2005-06	0.998	3.590	0.067	0.170	0.066	0.060	0.587	1.021	0.339
2006-07	0.997	6.017	0.067	0.192	0.039	0.058	0.671	0.482	0.128

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicates that there is very less dependence on reinsurance.

ii. Capital Utilisation Efficiency : Net premium to capital - There is a decrease in the ratio which is not a good sign for the company.

iii. Management Effectiveness: Commission to net premium – This ratio symbolizes that the management was very effective as the expense ratio is fair enough and also stable over the years.

iv. Operating expenses to gross premium – The ratio is very satisfactory as the operating expenses are very less as compared to gross premium.

Liquidity:

v. Liquid asset to liquid liabilities- The proportion of liquid assets in total assets of the firm has been decreasing gradually.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm is good enough.

vii. Current assets to current liabilities – The ratio is steady but the ratio is low compared to many other firms.

Profitability:

viii. Investment income to investment asset - The investment income is very low over the years.

ix. Investment income to net premium – The ratio has been fluctuating and is very low in recent past.

6.3.IX. IDBI Federal Life Insurance Company Limited

The ratios calculated for IDBI Federal Life Insurance Company Limited are as under

Table 6.11: Ratios of IDBI Federal Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	1	0.060	0.031	0.843	0.194	0.097	1.777	0.045	0.56
2008-09	0.999	0.710	0.049	0.374	0.158	0.130	1.025	(0.037)	(0.03)
2009-10	0.996	1.267	0.078	0.260	0.147	0.124	1.002	0.236	0.13
2010-11	0.996	1.267	0.039	0.003	0.080	0.670	0.212	0.719	1.415
2011-12	0.994	1.153	0.055	0.002	0.033	0.704	0.117	0.520	1.284
2012-13	1	0.915	0.087	0.002	0.027	0.731	0.089	0.352	1.193
2013-14	1	0.998	0.110	0.002	0.029	0.765	0.101	0.377	1.366
2014-15	1	1.023	0.103	0.002	0.024	0.794	0.095	0.344	1.430
2015-16	1	1.326	0.068	0.003	0.027	0.826	0.091	0.370	1.488
2016-17	0.856	1.539	0.072	0.004	0.021	0.847	0.089	0.290	1.147
2017-18	0.467	1.942	0.065	0.004	0.025	0.874	0.094	0.352	1.360

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicates that there is very less dependence on reinsurance for almost all the years. But in the recent past it has decreased which symbolizes the company's dependence on reinsurance.

ii. Capital Utilisation Efficiency : Net premium to capital – This ratio has been increasing over the years which is a good indicator.

iii. Management Effectiveness: Commission to net premium – This ratio symbolizes that the management was very effective as the expense ratio is quite low.

iv. Operating expenses to gross premium – The ratio is very satisfactory as the operating expenses are very less as compared to gross premium.

Liquidity:

v. Liquid asset to liquid liabilities- The proportion of liquid assets in total assets of the firm has been decreasing gradually.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm have been gradually increasing.

vii. Current assets to current liabilities – The ratio is very low and therefore reflects the asset-liability management is not proper for the company.

Profitability:

viii. Investment income to investment asset - The investment income is very low over the years.

ix. Investment income to net premium – The ratio is increasing year on year.

6.3.X Kotak Life Insurance Company Limited

The different ratios calculated for Kotak Life Insurance Company Limited are as under:

Table 6.12a: Ratios of Kotak Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.983	3.462	0.093	0.251	0.067	0.066	0.924	0.467	0.167
2008-09	0.984	4.522	0.098	0.259	0.053	0.054	0.903	(0.396)	(0.138)
2009-10	0.994	5.588	0.059	0.200	0.028	0.038	0.697	0.988	0.377
2010-11	0.990	0.560	0.030	0.200	0.670	1.000	0.560	0.560	0.010
2011-12	0.990	5.760	0.020	0.190	0.740	1.000	0.680	0.560	0.010
2012-13	1	5.750	0.030	0.180	0.770	1.000	0.420	0.610	0.020
2013-14	0.720	0.740	0.030	0.120	0.020	0.030	1.000	0.300	9.390
2014-15	0.630	0.210	0.300	0.640	0.500	0.230	0.430	7.950	1.560
2015-16	0.920	1.050	0.070	0.24	0.200	1.000	0.560	0.600	0.010
2016-17	0.430	7.780	0.080	0.082	0.770	0.400	0.710	1.150	0.020
2017-18	0.830	10.07	0.060	0.065	0.930	0.780	4.530	0.460	0.060

Source: calculated

Table 6.12b: Ratios of Kotak Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	0.972	0.073	0.246	4.879	0.202	0.072	2.798	0.135	1.90
2002-03	0.985	0.304	0.192	1.522	0.200	0.089	2.246	0.125	0.33
2003-04	0.974	0.974	0.131	0.596	0.186	0.110	1.161	0.129	0.104
2004-05	0.985	2.174	0.085	0.239	0.113	0.067	1.358	0.136	0.051
2005-06	0.982	2.499	0.097	0.216	0.074	0.061	1.081	0.463	0.22
2006-07	0.979	2.880	0.084	0.247	0.086	0.073	1.043	0.297	0.133

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicated that there was very less dependence on reinsurance for almost all the years. But in the recent past it has decreased which symbolizes the company's dependence on reinsurance.

ii. Capital Utilisation Efficiency : Net premium to capital – This ratio has been increasing over the years which is a good indicator. But there was sudden fall during year ending 2014 to 2016.

iii. Management Effectiveness: Commission to net premium – This ratio symbolizes that the management was very effective as the expense ratio is quite low.

iv. Operating expenses to gross premium – The ratio is very satisfactory as the operating expenses are very less as compared to gross premium.

Liquidity:

v. Liquid asset to liquid liabilities- The proportion of liquid assets in total assets of the firm has been fluctuating all along. But it is quite high in the recent past.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm have been fluctuating severely and is low in the recent past.

vii. Current assets to current liabilities – The ratio was very low. However, in 2016-17 it has improved a lot.

Profitability:

viii. Investment income to investment asset - The investment income is very low over the years and veryb fluctuating

ix. Investment income to net premium – The ratio does not follow any trend and has decreased drastically in year ending 2014.

6.3.XI Life Insurance Corporation of India

The financial performance of LIC is given below:

Table 6.13a: Ratios of Life Insurance Corporation of India

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.999	29941.12	0.064	0.055	0.015	0.677	0.042	0.101	0.377
2008-09	0.999	31437.31	0.064	0.057	0.015	.131	0.017	0.069	0.272
2009-10	0.999	152766.11	0.065	0.065	0.043	.834	0.019	0.153	0.604
2010-11	0.750	0.242	0.136	1.556	0.284	0.036	0.258	90.455	2.995
2011-12	0.750	0.410	0.144	1.235	0.650	0.267	0.268	101.936	2.404
2012-13	0.750	0.555	0.172	1.070	0.808	0.043	0.168	2.967	0.069
2013-14	0.757	0.680	0.082	0.776	0.526	0.034	0.333	3.358	0.105
2014-15	0.750	1.474	0.048	0.374	0.106	0.032	0.601	11.003	0.056
2015-16	0.750	1.845	0.036	0.353	0.417	0.033	0.417	2.305	0.068
2016-17	0.750	2.290	0.030	0.360	0.972	0.036	0.029	49.377	1.529

Source: calculated

Table 6.13b: Ratios of Life Insurance Corporation of India

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	0.999	9969.19	0.091	0.085	0.057	0.023	5.541	0.145	0.479
2002-03	0.999	10920.47	0.092	0.084	0.053	0.028	5.484	0.126	0.476
2003-04	0.999	12626.13	0.091	0.080	0.053	0.031	4.747	0.114	0.473
2004-05	0.999	14171.60	0.088	0.088	0.056	0.038	4.823	0.111	0.483
2005-06	0.999	18151.84	0.077	0.066	0.061	0.048	5.405	0.099	0.441
2006-07	0.999	25556.45	0.071	0.055	0.065	0.054	7.515	0.095	0.358

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicated that there was very less resort to reinsurance for almost all the years. But it decreased from 2010-11. The risk retention is lowest in 2012-2013. It has been again increased to 0.75 in 2016-2017 which shows that risk retention was good in 2012-2013.

ii. Capital Utilisation Efficiency : Net premium to capital – This ratio reflects the soundness of the company and proves that it is the true market leader.

iii. Management Effectiveness: Commission to net premium – The expenses ratio has been found decreasing which is a good indicator of firm's management efficiency

iv. Operating expenses to gross premium – The ratio indicates the performance of LIC is well and good as operating expense ratio is decreasing year by year.

Liquidity:

v. Liquid asset to liquid liabilities- The liquid assets ratio is not stable throughout but has increased in the later part of the study.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm is very low all throughout.

vii. Current assets to current liabilities – The current ratio of the company has been increasing and it has been highest in 2014-2015.

Profitability:

viii. Investment income to investment asset - The overall operating ratio has been increasing from 2010-2011 and 2011-2012 after we can see a fall till 2015-2016. Again it has been raised to 1.53 approx in 2016-2017.

ix. Investment income to net premium – The profitability ratio indicates that it has been very good in 2011-2012 . Then it had a fall which was recovered to some extent in 2016-17.

6.3.XII Max Life Insurance Company Limited

The ratios computed for Max New York Life Insurance are given below:

Table 6.14a: Ratios of Max Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.991	2.608	0.143	0.319	0.071	0.098	0.637	0.161	0.091
2008-09	0.990	2.143	0.103	0.417	0.073	0.077	0.822	(0.084)	(0.048)
2009-10	0.987	2.611	0.088	0.310	0.046	0.059	0.699	0.423	0.423
2010-11	0.511	0.740	0.182	0.103	0.660	0.437	0.383	2.381	0.569
2011-12	0.622	0.455	0.145	0.224	0.721	0.486	0.338	2.365	1.048
2012-13	0.668	0.474	0.123	0.217	0.736	0.454	0.481	2.313	1.186
2013-14	0.648	0.479	0.130	0.208	0.679	0.435	0.400	2.836	1.386
2014-15	0.695	0.539	0.161	0.195	0.624	0.485	0.367	2.614	1.516
2015-16	0.678	0.533	0.110	0.198	0.621	0.504	0.303	2.961	1.607
2016-17	0.624	0.538	0.131	0.177	0.567	0.485	0.281	4.291	2.564
2017-18	0.615	0.558	0.142	0.166	0.571	0.504	0.293	3.980	2.399

Source: calculated

Table 6.14b: Ratios of Max Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	0.991	0.155	0.307	2.179	0.109	0.096	1.119	0.117	0.036
2002-03	0.984	0.373	0.195	1.159	0.109	0.108	0.572	0.097	0.16
2003-04	0.985	0.613	0.190	0.756	0.128	0.123	0.619	0.088	0.082
2004-05	0.988	0.877	0.159	0.596	0.100	0.110	0.579	0.075	0.065
2005-06	0.989	1.399	0.172	0.431	0.098	0.102	0.702	0.120	0.090
2006-07	0.990	2.028	0.154	0.342	0.090	0.103	0.719	0.113	0.072

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - Initially, the ratio is 1 or almost equal to 1 which indicated that there was very less resort to reinsurance for almost all the years. But it decreased from 2010-11.

ii. Capital Utilisation Efficiency : Net premium to capital – This ratio was satisfactory till 2009-10 but gradually decreased since then.

iii. Management Effectiveness: Commission to net premium – The expenses ratio has been found quite low but is still high compared to many other countries.

iv. Operating expenses to gross premium – The ratio indicates effective management of expenses.

Liquidity:

v. Liquid asset to liquid liabilities- The liquid assets to total assets have increased over the years.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm has increased during the study period.

vii. Current assets to current liabilities – The current ratio of the company has been decreasing which is not very healthy for the firm.

Profitability:

viii. Investment income to investment asset - The ratio has been increasing from 2010-2011. The ratio has increased over the years.

ix. Investment income to net premium – The profitability ratio indicates that it has been very good in the recent past.

6.3.XIII PNB Met Life Insurance Company Limited

Following are the ratios for PNB Met Life Insurance Company Limited:

Table 6.15a: Ratios of PNB Met Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.990	1.509	0.232	0.368	0.106	0.117	0.624	0.155	0.072
2008-09	0.990	1.252	0.177	0.317	0.076	0.073	0.723	0.067	0.024
2009-10	0.988	1.412	0.117	0.269	0.036	0.052	0.537	0.251	0.096
2010-11	0.926	1.429	0.080	0.249	0.675	0.951	0.562	0.452	0.011
2011-12	0.966	1.273	0.035	0.217	0.749	0.946	0.688	0.529	0.017
2012-13	0.958	1.359	0.044	0.198	0.636	0.959	0.807	0.779	0.026
2013-14	0.952	1.207	0.050	0.224	0.480	0.938	0.934	0.971	0.040
2014-15	0.946	1.113	0.057	0.229	0.415	0.964	0.426	1.219	0.059
2015-16	0.947	1.223	0.056	0.232	0.336	0.966	0.300	1.238	0.064
2016-17	0.946	1.405	0.057	0.247	0.376	0.971	1.029	1.486	0.071
2017-18	0.947	1.608	0.056	0.219	0.282	0.970	0.347	1.751	0.082

Source: calculated

Table 6.15b: Ratios of PNB Met Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	0.979	0.004	0.340	13.604	0.100	0.023	4.225	0.060	12.66
2002-03	0.986	0.071	0.214	3.848	0.164	0.087	1.456	0.097	1.105
2003-04	0.986	0.177	0.237	1.554	0.156	0.083	1.370	0.088	0.297
2004-05	0.973	0.338	0.183	1.170	0.176	0.103	1.106	0.073	0.122
2005-06	0.990	0.868	0.198	0.784	0.137	0.113	0.732	0.125	0.108
2006-07	0.991	0.921	0.215	0.471	0.095	0.128	0.496	0.116	0.08

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicated that there was very less resort to reinsurance for almost all the years.

ii. Capital Utilisation Efficiency : Net premium to capital – This ratio is moderate but need further control.

iii. Management Effectiveness: Commission to net premium – The expenses ratio has decreased over the years..

iv. Operating expenses to gross premium – The ratio has increased which indicates effective management of expenses.

Liquidity:

v. Liquid asset to liquid liabilities- The liquid assets to total assets have decreased over the years.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm has increased during the study period.

vii. Current assets to current liabilities – The current ratio of the company has been quite low during the period of study.

Profitability:

viii. Investment income to investment asset - The ratio has been increasing from 2013-2014. The ratio has increased over the years.

ix. Investment income to net premium – The profitability ratio indicates that it is not at all satisfactory.

6.3.XIV Reliance Life Insurance Company Limited

The financial position of Reliance Life Insurance Company is enumerated below:

Table 6.16a: Ratios of Reliance Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.996	2.800	0.086	0.320	0.131	0.122	0.831	(0.138)	(0.017)
2008-09	0.996	4.229	0.121	0.390	0.080	0.074	0.805	(1.570)	(0.194)
2009-10	0.997	5.657	0.095	0.248	0.044	0.043	0.859	4.261	0.528
2010-11	1.988	5.671	0.384	0.493	0.847	6.080	0.861	0.513	0.991
2011-12	1.959	5.642	0.329	0.466	0.489	0.735	0.795	0.337	0.845
2012-13	1.573	4.663	0.328	0.393	0.511	0.998	0.476	0.307	0.823
2013-14	1.007	3.382	0.256	0.318	0.514	1.622	0.382	0.459	1.451
2014-15	1.006	3.580	0.238	0.326	0.777	1.239	0.358	0.641	1.538
2015-16	0.994	3.838	0.190	0.320	0.915	2.629	0.815	0.905	1.733
2016-17	1.006	3.676	0.177	0.317	1.033	3.508	0.713	0.713	1.216
2017-18	1.007	3.366	0.251	0.195	0.800	5.329	1.246	0.805	1.493

Source: calculated

Table 6.16b: Ratios of of Reliance Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	1	0.002	0.250	40.10	0.946	0.072	13.15	0.017	7.36
2002-03	0.929	0.048	0.278	5.252	0.102	0.083	1.231	0.094	1.61
2003-04	0.969	0.188	0.182	1.680	0.109	0.071	0.989	0.133	0.401
2004-05	0.986	0.484	0.075	0.721	0.095	0.064	0.936	0.107	0.101
2005-06	0.991	0.671	0.064	0.517	0.142	0.105	0.925	0.397	0.243
2006-07	0.995	1.507	0.099	0.427	0.138	0.143	0.705	0.210	0.048

Source: calculated

Inferences:

i.Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicated that there was very less resort to reinsurance for almost all the years.

ii. Capital Utilisation Efficiency : Net premium to capital – This ratio is moderate but need further control.

iii. Management Effectiveness: Commission to net premium – The expenses ratio has decreased over the years..

iv. Operating expenses to gross premium – The ratio has decreased which indicates effective management of expenses.

Liquidity:

v. Liquid asset to liquid liabilities- The liquid assets to total assets have decreased over the years.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm has increased during the study period.

vii. Current assets to current liabilities – The current ratio of the company has been quite low during the period of study.

Profitability:

viii. Investment income to investment asset - The ratio has been increasing from 2013-2014. The ratio has increased over the years.

ix. Investment income to net premium – The profitability ratio indicates that it is not very satisfactory in comparison to the other companies.

6.3.XV Sahara Life Insurance Company Limited

The following are the ratios reflecting financial performance of Sahara Life Insurance company limited:

Table 6.17a: Sahara Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.999	0.619	0.143	0.165	0.039	0.034	1.115	0.131	0.201
2008-09	0.999	0.890	0.117	0.192	0.069	0.032	2.046	0.091	(0.124)
2009-10	0.999	1.080	0.095	0.148	0.051	0.030	1.695	0.615	0.827
2010-11	0.75	0.136	0.105	0.098	0.44	0.815	0.97	0.47	0.134
2011-12	0.933	0.159	0.095	0.25	0.5	0.023	1.044	0.37	0.104
2012-13	0.933	0.144	0.102	0.42	0.59	0.05	0.74	6.33	0.15
2013-14	0.933	0.115	0.0903	0.53	0.8	0.014	0.25	6.32	0.2
2014-15	0.918	0.085	0.014	0.48	0.8	0.29	1.22	50.29	0.29
2015-16	0.913	0.084	0.053	0.57	0.28	0.29	3.95	47.3	0.28
2016-17	0.921	0.077	0.051	0.7	0.3	0.21	3.4	40.58	0.28

Source: calculated

Table 6.17b: Ratios of Sahara Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2004-05	1	0.177	0.024	0.064	0.065	0.012	5.105	0.080	0.406
2005-06	1	0.177	0.137	0.405	0.060	0.021	2.631	0.630	0.322
2006-07	0.999	0.325	0.131	0.302	0.047	0.034	1.282	0.091	0.278

Source: calculated

Inferences:

i.Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicated that there was very less resort to reinsurance for almost all the years. It has gradually decreased in the later years.

ii.Capital Utilisation Efficiency : Net premium to capital – The Ratio has been decreasing which indicated the greater financial strength of the company.

iii. Management Effectiveness: Commission to net premium – The expenses ratio has decreased over the years which is a good sign.

iv. Operating expenses to gross premium – The ratio has increased which is a threat to management efficiency.

Liquidity:

v. Liquid asset to liquid liabilities- The liquid assets to total assets is very low over the years.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm is very low during the study period.

vii. Current assets to current liabilities – The current ratio of the company has been quite high during the later period of study.

Profitability:

viii. Investment income to investment asset - The ratio has been increasing drastically from 2014-15.

ix. Investment income to net premium – The profitability ratio indicates that it is not very satisfactory.

6.3.XVI SBI Life Insurance Company Limited

The financial position of SBI life insurance company limited is given below:

Table 6.18a: SBI Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.998	5.611	0.072	0.079	0.027	0.045	0.608	0.148	0.103
2008-09	0.999	7.202	0.065	0.086	0.027	0.068	0.399	-0.259	-0.227
2009-10	0.998	10.080	0.075	0.065	0.027	0.049	0.554	0.621	0.593
2010-11	1	12.909	0.052	0.071	0.199	0.451	0.224	7.599	0.236
2011-12	1	13.081	0.040	0.079	0.720	0.485	1.495	1.751	0.060

2012-13	1	10.382	0.055	0.112	0.629	0.371	1.474	9.315	0.449
2013-14	1	10.657	0.052	0.116	0.627	0.325	1.654	11.922	0.630
2014-15	1	12.780	0.047	0.093	0.569	0.296	1.523	33.422	1.815
2015-16	1	15.665	0.046	0.094	0.484	0.350	0.923	24.561	1.220
2016-17	0.101	2.102	0.373	0.079	0.028	0.024	0.969	0.011	0.506

Source: calculated

Table 6.18b: SBI Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	1	0.117	0.013	0.768	0.204	0.039	5.227	0.112	0.873
2002-03	1	0.579	0.026	0.322	0.136	0.055	2.408	0.129	0.263
2003-04	0.999	1.289	0.042	0.254	0.165	0.098	1.604	0.08	0.100
2004-05	0.997	1.712	0.039	0.207	0.093	0.099	0.912	0.071	0.084
2005-06	0.998	2.525	0.065	0.177	0.095	0.098	0.957	0.126	0.167
2006-07	0.998	5.847	0.067	0.11	0.06	0.078	0.761	0.116	0.092

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicated that there was very less resort to reinsurance for almost all the years. But it has decreased drastically in the year ending 2017.

ii. Capital Utilisation Efficiency : Net premium to capital – The ratio has been increasing rapidly upto 2015-16 but decreased drastically in 2016-17.

iii. Management Effectiveness: Commission to net premium – The expenses ratio has decreased over the years except 2016-17.

iv. Operating expenses to gross premium – The ratio has declined over the years which is favourable for the management.

Liquidity:

- v. Liquid asset to liquid liabilities- The liquid assets to total assets has been decreasing over the years.
- vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm is very low during the study period.
- vii. Current assets to current liabilities – The current ratio of the company has been quite low. From year ending 2012 to 2015 it had increased but it has again started decreasing.

Profitability:

- viii. Investment income to investment asset - The ratio has been increasing drastically from 2014-15 but 2016-17 it has decreased drastically.
- ix. Investment income to net premium – The profitability ratio indicates that it is not very satisfactory.

6.3.XVII Shriram Life Insurance Company Limited

The financial status of Shriram life insurance company limited is stated below:

Table 6.19: Shriram Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2005-06	0.999	0.082	0.347	0.638	0.083	0.116	0.716	0.028	0.351
2006-07	0.999	1.472	0.196	0.133	0.137	0.145	0.94	0.816	0.061
2007-08	1	2.863	0.125	0.142	0.117	0.12	0.981	0.103	0.045
2008-09	0.999	3.485	0.129	0.155	0.097	0.104	0.938	0.176	0.074
2009-10	0.999	4.885	0.109	0.203	0.048	0.072	0.666	0.366	0.13
2010-11	0.370	1.810	0.294	0.203	0.131	0.624	1.012	0.213	0.013
2011-12	0.313	1.469	0.161	0.160	0.112	0.628	1.026	0.068	0.005

2012-13	0.736	1.080	0.262	0.508	0.537	0.782	1.030	-0.029	-0.003
2013-14	0.324	1.085	0.251	0.282	0.181	0.669	1.047	0.001	0.00006
2014-15	0.345	1.166	0.166	0.316	0.804	3.208	1.033	0.059	0.00006
2015-16	0.403	1.690	0.137	0.415	0.530	0.791	1.057	0.110	0.00009
2016-17	0.415	2.293	0.151	4.563	0.778	0.900	1.021	0.087	0.00006
2017-18	0.436	2.491	0.161	22.177	0.919	0.895	1.028	0.084	0.00006

Source: calculated

Inferences:

i. Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicated that there was very less resort to reinsurance for almost all the years. But it has decreased since 2010-11.

ii. Capital Utilisation Efficiency : Net premium to capital – The ratio has been increasing which is a good symptom of financial health.

iii. Management Effectiveness: Commission to net premium – The expenses ratio has decreased over the years.

iv. Operating expenses to gross premium – The ratio has declined over the years which is favourable for the management. But in 2015-16 it has increased and the situation aggravated further in 2016-17.

Liquidity:

v. Liquid asset to liquid liabilities- The liquid assets to total assets has been decreasing over the years.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm is very low during the study period.

vii. Current assets to current liabilities – The current ratio of the company has been quite low but steady.

Profitability:

viii. Investment income to investment asset - The ratio has been very low throughout

ix. Investment income to net premium – The profitability ratio indicates that it is not very satisfactory.

6.3.XVIII Tata AIA Life Insurance Company Limited

The financial ratios of Tata AIA insurance company limited is given below:

Table 6.20a: Tata AIA Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2007-08	0.993	2.337	0.113	0.343	0.059	0.082	0.627	0.180	0.146
2008-09	0.995	1.8	0.088	0.390	0.073	0.077	0.773	0.322	0.257
2009-10	0.997	1.813	0.081	0.294	0.034	0.048	0.617	0.740	0.607
2010-11	0.901	0.401	0.042	0.24	0.88	0.0076	0.092	2.71	0.45
2011-12	0.913	0.32	0.034	0.85	0.77	0.0024	0.143	15.136	3.6
2012-13	0.928	0.25	0.404	0.65	0.87	0.013	0.098	13.618	4.55
2013-14	0.926	0.21	0.38	0.64	0.911	0.012	0.058	15.422	7.051
2014-15	0.936	0.221	0.281	1.011	0.923	0.016	0.047	23.35	10.594
2015-16	0.923	1.1	0.444	0.161	0.93	0.02	0.037	16.4	1.798
2016-17	0.931	0.32	0.77	0.39	0.86	0.03	0.15	1.85	0.58

Table 6.20b: Tata AIA Life Insurance Company Limited

Year	Net premium to gross premium	Net premium to capital	Commission to net premium	Operating expenses to gross premium	Liquid assets to total assets	Liquid liabilities to total liabilities	Current asset to current liabilities	Investment income to investment asset	Investment income to net premium
2001-02	0.997	0.115	0.271	1.910	0.274	0.064	3.646	0.077	0.393
2002-03	0.989	0.438	0.184	0.782	0.198	0.115	1.247	0.088	0.134
2003-04	0.984	1.087	0.167	0.454	0.205	0.117	1.291	0.071	0.056
2004-05	0.983	1.522	0.184	0.398	0.165	0.133	0.990	0.066	0.049
2005-06	0.985	1.940	0.159	0.330	0.110	0.094	1.003	0.217	0.164

2006-07	0.992	2.479	0.141	0.261	0.079	0.085	0.832	0.153	0.124
---------	-------	-------	-------	-------	-------	-------	-------	-------	-------

Inferences:

i. Risk Retention: Net premium to gross premium - The ratio is 1 or almost equal to 1 which indicated that there was very less resort to reinsurance for almost all the years.

ii. Capital Utilisation Efficiency : Net premium to capital – The ratio has been decreasing which is a bad symptom of financial health.

iii. Management Effectiveness: Commission to net premium – The expenses ratio has been very low over the years.

iv. Operating expenses to gross premium – The ratio has been fluctuating over the years which is not favorable for the management.

Liquidity:

v. Liquid asset to liquid liabilities- The liquid assets to total assets has been decreasing over the years.

vi. Liquid liabilities to total liabilities – The proportion of liquid liability in the total liability of the firm is very low during the study period.

vii. Current assets to current liabilities – The current ratio of the company has been quite low.

Profitability:

viii. Investment income to investment asset - The ratio has been increasing except in 2016-17.

ix. Investment income to net premium – The ratio was gradually improving over the years. But since 2015-16 the trend is downward.

6.4 Ranking of Life Insurers on the basis of Ratios

This section emphasizes on comparison of the life insurers operating in India based on their financial performance. Those companies which existed between financial year 2007-08 and 2015-16 have been studied here. Though the ratios has been calculated since its inception to date based on data availability but to give an uniform size to the data set, a window of 8 years has been considered. The reason behind this was to include as much company as possible. Few companies like Edelweiss

Tokyo life insurance company, India First life insurance Company, Aegon Life Insurance Company, Canara HSBC etc. has not been included in this study as they are novices in the field.

The comparison has been made using ranking method based on the calculated ratios. Equal weight has been given to all the ratios. So the ranking was possible for only those eighteen companies as mentioned in the earlier section. All nine ratios used in the CAMEL Framework (section 6.3) have been used to meet the purpose of the study.

The methodology adopted for the study is as follows:

- (a) In the first part the insurance companies has been ranked for each individual year. To get the average ranking of all the years the cumulative rank of all the years has been divided by the number of years. This gives us an idea of overall ranking based on each year's performance.
- (b) Another method of understanding overall rank is by finding the average rank company wise. For this the total rank of each company has been calculated for the ratio and then divided by the total number of ratios, i.e. 9.
- (c) To sum up final ranking has been done based on the value of average rank. The company with the minimum average rank is given the first rank and the next placed insurers are given the rank of two, three, four, and so on.

Following the above mentioned process the ranking of the insurers is as follows:

Table 6.21: Rank of Life Insurance Companies

Company	Ratio wise ranking (Step I)									Average Rank (Step II)	Final Rank (Step III)
	Net Profit/Gross Profit	Net Profit/Capital	Commission/Net Profit	Operating Exp./Gross Profit	Liquid Assets/Total Assets	Liquid Liabilities/Total Liabilities	Current Assets/Current Liabilities	Inv. Income/Inv. Assets	Inv. Income/Net Profit		
AVIVA	11.6	11	15.4	6.4	8.6	11.3	11.3	6.2	8.9	10.08	8
BAJAJ	4.3	7.2	7.7	6.2	9.7	11.8	11.8	13.5	8.5	8.97	12
BHARTI	3.5	5.5	2.4	1.2	2.7	3.8	3.8	6.1	4.6	3.73	18
BIRLA	11.5	6.4	8.8	11.3	13.1	4	4	3.2	9.9	8.02	16
INGEXIDE	14	11.2	9.6	9.4	12.8	4.8	4.8	11.5	14	10.23	6

FUTUR E	9	11.3	10.3	7	7.5	8.1	8.1	9.5	12	9.20	11
HDFC	6.4	6.7	12.5	13.4	15.5	6.8	6.8	9.9	7.5	9.50	10
ICICI	8.5	17.5	15.9	14.2	8.4	11.3	11.3	16	10.8	10.66	3
IDBI	6.3	11.9	11.1	14.3	12.6	12.8	12.8	12.2	6.1	11.12	2
KOTA K	12.2	7.6	12.6	11.8	10	9.8	9.8	8.9	11.4	10.46	4
LIC	11.5	7.9	11.7	7.9	11.3	15.5	15.5	6.3	7.7	12.59	1
MAX	16.3	12.4	5.7	10	8.5	12.6	12.6	7	6.7	10.20	7
PNBM ET	13.1	9.5	9	8.6	9.2	10.8	10.8	9.1	13.6	10.41	5
REL	7.1	4.2	4.1	6.5	7.7	10.2	10.2	11.8	7.8	7.73	17
SAHA RA	5.5	16.4	8.5	9.1	10.2	5.5	5.5	6.2	9.9	8.53	15
SBI	7.3	2.9	12.6	17	12.6	8.9	8.9	6.7	9.2	9.57	9
SHRIR AM	11.7	7.3	4	9.9	2.8	6.1	6.1	13.6	15.7	8.58	14
TATA	6.2	13.4	6.9	5.6	6.7	16.1	16.1	4.2	4.5	8.86	13

Source: Calculated

Therefore, the overall results reveal that LIC is found to be the best so it has been assigned the rank of one. Among the private insurers, the leading ones on the basis of their ranks are-ICICI Pru, IDBI Life, Kotak Life, Exide Life, PNB Met Life and Max Life Insurance Company.

This study aimed to find out the financial strengths and weaknesses of the Indian life insurance companies. Various financial ratios have been used for understanding the financial soundness of the life insurers. The key aspects addressed are capital adequacy, asset quality, reinsurance and actuarial issues, management soundness, earnings/ profitability and liquidity. Liquidity has been a big drawback for most of the insurers under study. The study also found that there is a great asymmetry in the results during the period of nine years. Investment yield is a major problem for some insurers which requires serious attention by the regulator and the respective firm. The reinsurance and cost control is improving as the companies are getting matured over the years. So, overall we may see that the sector as a whole is improving gradually which is a positive symptom for the industry.