ABSTRACT

FINANCIAL PERFORMANCE OF LIFE INSURANCE COMPANIES IN INDIA – AN ANALYTICAL STUDY

(2003-04 TO 2012-13)

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ABSTRACT

CHAPTER-1

INTRODUCTION

Insurance may be defined as achievement of risk transfer through the pooling of risk. In business model of life insurance companies, profit means earned premium plus investment income minus incurred loss minus underwriting loss. In India, both life and non-life sector was controlled by nationalized companies- non-life insurance by General Insurance Corporation of India along with its four subsidiaries and life insurance by Life Insurance Corporation of India (LICI). After formation of IRDA (Insurance Regulatory Development Authority), the entry of the private sector was allowed both in life insurance and non life insurance sector in India from 2000 onwards.

Statement of the Problem

The potential and performance of insurance sector is world-wide judged with two parameters- insurance penetration and insurance density. Although life insurance penetration has gone up from 2.15% in 2001 to 3.17% in 2012 and life insurance density from USD 9.1 in 2001 to USD i42.7 in 2012, yet it is very low when we go for international comparison. The IRDA, the regulatory body of the Indian insurance industry has been supervising the life insurance activities by framing different regulations from time to time. These regulations are framed to ensure that the financial performance of life insurance companies on the basis of financial statements is in sound condition or not. With the advancement of the process of liberalization, all life insurance companies in India might have experienced both favourable and unfavourable impact of competitions in between companies on their financial performance and it has, at this situation, become imperative to undertake an analytical study of financial performance of life insurance companies in India to assess the position, strength and weaknesses of life insurance companies in India. The study is significant in the sense that it will provide a basis for future activities to business promoters of insurance companies, insurance managers, insurance regulators, business professionals, and policyholders.

Conceptual Framework

The process by which the financial strengths and weaknesses of the firm is found out by linking the relationship between items of Financial Statements is called Financial performance analysis. Financial Statements (Balance Sheet, Profit and Loss A/C and related statements) are prepared to find out the financial results of the business in a financial year. But it is not possible to draw fruitful conclusions unless the information of financial statements are analyzed by linking the relations of component and sub-component parts of financial statement with the help of available tools. Financial performance of a firm may be assessed with the help of tools like financial ratios (being relative measures and permitting the comparison of groups of unequal size and are used for inter-firm and intra-firm comparison) and standardized financial statements e.g., comparative statement, common-size statement etc. , time series analysis, comparing the ratios of firm with industry average, and by combining a set of ratios and answering the solutions to the problems that are generally raised by business managers and others. Besides, financial performance may also be assessed by way of 'analytical study' which is a system of mathematical models or statistical techniques applied on financial statement variables to test hypothesis, to interpret relationships between factors and to measure variations by comparing groups. An analytical study is also known as statistical method which may be applied to quantitative numerical data used in business and other fields published by various Government Departments and Institutions like the Central Statistical Organization, NABARD, Reserve Bank of India, Insurance regulatory Development Authority etc.

Objectives of the Study

The broad objective of this study is to analyze the financial performance of life insurance companies in India. Based on this objective the researcher elucidates the following specific objectives for the study:

1) To analyze the profitability of life insurance companies in India;
2) To examine the solvency of life insurance companies in India;
3) To analyze the liquidity of life insurance companies in India; and
4) To study overall financial performance of life insurance companies in India.

Hypotheses of the Study

The following broad null hypotheses have been framed for the study:

1) There is no significant difference in Profitability across the Life Insurance Companies in India;
2) There is no significant difference in Solvency across the Life Insurance Companies in India; and
3) There is no significant difference in Liquidity indicators across the Life Insurance Companies in India.
4) There is no significant difference in overall financial performance indicators across the Life Insurance Companies in India.
5) There is no significant relationship between ROE (Return on Equity) and other selected explanatory variables.

Sources of Data and Methodology

Source of Data

The study is conducted on the basis of secondary data collected from the Annual Reports of IRDA.

Selection of Companies for Study

The population of the study includes twenty four life insurance companies operating in India. Thirteen (13) life insurance companies in India are selected from the Annual Report of IRDA of India purposively for the study in order of their date of registration. These thirteen companies represent more than 50% of total number of companies operating in India belonging to a market share in gross direct premium of 97.06%. The selected life insurance companies of India are HDFC Standard Life Insurance Company Ltd., ICICI Prudential Life Insurance Co. Ltd., Birla Sun Life Insurance Co. Ltd., Tata AIA Life Insurance Co. Ltd., SBI Life Insurance Co. Ltd., ING Vysya Life Insurance Co. Ltd., Bajaj Allianz Life Insurance Co. Ltd., MetLife India Insurance Co. Ltd., Aviva Life Insurance Co. Ltd., Kotak Mahindra Life Insurance Company Ltd., Max New York Life Insurance Company Ltd., Reliance Life Insurance Company Ltd. and Life Insurance Corporation of India. Other life insurance companies are not taken into study as their period of operation is less than ten years.

Period of the Study

The period of the study covers ten (10) years from 2003-04 to 2012-13 after the life insurance sector is opened up for private sector from the year 2000 ignoring the periods from 2000-2001 to 2002-2003 since the life insurance companies during these periods have been engaged in structuring/ restructuring the organization for facing the competition.

Tools and Techniques used

1) Ratio
2) Graphs and Diagrams
3) Mean and Standard Deviation
4) Method of Least Square
5) One-way ANOVA
6) Post hoc Test
7) Kruskal-Wallis Test or H-Test
8) Multiple Regressions

Limitations of the study

As the study is based on secondary data and the limitations of secondary data are known to everybody being a compiled statement. The study is limited to the assessment of financial performance with respect to liquidity, profitability and solvency of life insurance companies in India. The entry and exit of new insurance players in the life insurance market may have economic, political and regulatory effects on the financial performance analysis have been ignored and all the selected companies in total may be taken to represent a life insurance industry in India throughout the study period.

Chapter Plan

Chapter-I-: Introduction, Statement of the Problem, Conceptual Framework, Objectives of the Study, Hypotheses, Review of Literature, Data Source and Methodology, Scope and Limitations and Chapter Plan.

Chapter-2-: Life Insurance Companies in India-An Overview

Chapter-3-: Profitability Analysis.

Chapter-4-: Solvency Analysis.

Chapter-5-: Liquidity Analysis.

Chapter-6-: Overall Financial Performance Analysis

Chapter-7-: Summary of Findings, Suggestions and Conclusion.

CHAPTER-2

LIFE INSURANCE COMPANIES IN INDIA –AN OVERVIEW

Important Years in Insurance Regulations in India at a glance

Year	Significant Regulatory Event
1912	The Indian Life Insurance Companies Act has been enacted as the first statute to regulate the life insurance business
1928	The Indian Insurance Companies Act has been enacted to enable the government to collect statistical information about both life and non-life insurance businesses.
1938	Earlier legislation has been consolidated and amended by the Insurance Act with the objective of protecting the interests of the insuring public.
1956	245 Indian and foreign insurers and provident societies have been taken over by the Central government and nationalized. LIC formed by an Act of Parliament, viz, LIC Act, 1956,
1956	LICI has been formed with a capital contribution of Rs. 5 crore from the Government of India.
1972	General insurance business in India has been nationalized.
1993	Malhotra Committee has been set up
1994	Malhotra Committee has submitted its Recommendations
1999	The goverment has decided that foreign equity in private insurance should be limited to 26%. The IRDA bill has been named as the Insurance Regulatory and Development Authority (IRDA) bill 1999.
2000	President has given consent to the IRDA Bill and monopoly power of public sector insurance companies has been abolished and private companies have been given the chance to compete with public companies.
2011-12	LICI added 95 crores of rupees to raise its capital to 100 crores of rupees.

Life Insurance Companies in India

Public Sector

Life Insurance Corporation of India

Private Sector

Sr. No.	Registration No.	Date of Registration	Name of Insurer
1	101	23/10/2000	HDFC Standard Life Insurance Co. Ltd.
2	104	15/11/2000	Max New York Life Insurance Co. Ltd.
3	105	24/11/2000	ICICI Prudential Life Insurance Co. Ltd.
4	107	10/01/2001	Kotak Mahindra Old Mutual Life Insurance Co. Ltd.
5	109	31/01/2001	Birla Sun Life Insurance Co. Ltd.
6	110	12/02/2001	Tata AIA Life Insurance Co. Ltd.
7	111	30/03/2001	SBI Life Insurance Co. Ltd.
8	114	02/08/2001	ING Vysya Life Insurance Co. Ltd.
9	116	03/08/2001	Bajaj Allianz Life Insurance Co. Ltd.
10	117	06/08/2001	PNB Met Life India Insurance Co. Ltd.
11	121	03/01/2002	Reliance Life Insurance Co. Ltd.
12	122	14/05/2002	Aviva Life Insurance Co. Ltd.
13	127	06/02/2004	Sahara India Life Insurance Co. Ltd.
14	128	17/11/2005	Shriram Life Insurance Co. Ltd.
15	130	14/07/2006	Bharati AXA Life Insurance Co. Ltd.
16	133	04/09/2007	Future Generali India Life Insurance Co. Ltd.
17	135	19/12/2007	IDBI Federal Life Insurance Co. Ltd.
18	136	08/05/2008	Canara HSBC Oriental Bank of Commerce Life Insurance Co. Ltd.
19	138	27/06/2008	Aegon Religare Life Insurance Co. Ltd.
20	140	27/06/2008	DLF Pramerica Life Insurance Co. Ltd.
21	142	26/12/2008	Star Union Dai-Ichi Life Insurance Co. Ltd.
22	143	05/11/2009	India First Life Insurance Co. Ltd.
23	147	2011/2012	Edelwesis Tokio Life Insurance Co Ltd

CHAPTER-3

PROFITABILITY ANALYSIS

Six ratios have been selected by the researcher from the review of literature and analyzed individually to assess the different aspects of profitability performance of life insurance companies and the life insurance industry under the study for ten years on the basis of descriptive statistics and to test statistically whether the differences in profitability performance across the selected life insurance companies are significant or not by applying ANOVA. To identify the companies which are responsible for significant differences, Post Hoc ANOVA has also been applied. The findings of the study are presented in selected profitability ratio-wise.

Ratio of Underwriting Income to Net Premium

The descriptive analysis shows that the underwriting income ratio of RELIANCE, LICI, ING VYSYA, AVIVA and PNB MET LIFE is below industry average. The performance of the life insurance industry as a whole improved up to 2008-09 and thereafter there is fluctuating trend observed up to the end of study period. ANOVA test finds that there is no significant difference in the ratio of underwriting income to net premium across the select life insurance companies under the study.

Ratio of Total Income from Investment to Total Investment

The analysis reveals that the ratio of total income from investment to total investment of BIRLA SUN LIFE, ICICI PRUDENTIAL AVIVA and RELIANCE are above industry average and analysis also indicates that the ratio of the industry has an increasing trend up to 2007-08 and thereafter there is fluctuating trend up to 2012-13. ANOVA test shows that there is no significant difference in the ratio of total income from investments to total investments across the select life insurance companies under the study.

Ratio of Operating Expenses to Net Premium

The descriptive analysis of operating expenses ratio reveals the fact that SBI LIFE and LICI maintain operating expenses to lower level and six companies, namely PNB MET LIFE, RELIANCE, AVIVA, ING VYSYA, MAX N Y and TATA AIA have maintained this ratio above industry average level. The analysis also indicates that operating expenses ratio for the industry has a decreasing trend. The ANOVA test has revealed that there is significant difference in the ratio across the select life insurance companies under the study. The Tukey HSD post hoc analysis reveals six mean comparisons being significantly different and these differences have arisen because the average ratios of PNB MET LIFE and RLIANCE are much on the higher side compared to LICI, SBI LIFE, HDFC STANDARD and ICICI PRUDENTIAL.

Ratio of Benefits Paid to Net Premium

By way of descriptive analysis of the ratio of benefits paid to net premium, it has been found that LICI, ICICI PRUDENTIAL, BAJAJ ALLIANZ, AVIVA and RELIANCE are suffering higher underwriting risk losses and eight select life insurance companies, namely, KOTAK MAHINDRA, BIRLA SUN LIFE, ING VYSYA, SBI LIFE, TATA AIA, HDFC STANDARD, PNB MET LIFE and MAX N Y have maintained the ratio below industry average. The study also reveals that the ratio benefits paid to net premium of the life insurance industry have increased during the study period alarmingly. ANOVA test shows that there is no significant difference in the ratio of benefits paid to net premium across the select life insurance companies under the study.

Ratio of Change in Policy Liabilities to Net Premium

The descriptive analysis has found that the ratios of change in policy liabilities are discouraging for LICI, SBI LIFE, HDFC STANDARD, ICICI PRUDENTIAL, BIRLA SUN LIFE, PNB MET LIFE and TATA AIA and the ratios of these companies are above industry average. It is also found that the ratio of the life insurance industry is more or less satisfactory except 2009-10 in which year almost all the life insurance companies has shown unsatisfactory results. Analysis of variance reveals that there is no significant difference in the ratio of change in policy liabilities to net premium across the select insurance companies during the study period.

Ratio of Profit before Tax to Net Premium

Descriptive analysis of the ratio of profit before tax to net premium has shown that the performance of BAJAJ ALLIANZ AND SBI LIFE is encouraging since they have maintained increasing trend of the ratio of profit before tax and it is also found that LICI have registered a slightly decreasing trend (if the ratios are calculated up to 5 decimal places). The descriptive analysis also reveals the fact that the ratios of profit before tax to net premium of BAJAJ ALLIANZ, BIRLA SUN LIFE, HDFC STANDARD, ICICI PRUDENTIAL, KOTAK MAHINDRA, LICI, SBI LIFE and TATA AIA are above the industry average and the ratio of AVIVA, ING VYSYA, PNB MET LIFE, MAX N Y and RELIANCE are below industry average. Findings also show that there is an improving trend of the ratio of profit before tax to net premium of life insurance industry in India during the study period because of control in the management expenses and actuarial liabilities and this indicates that the life insurance industry is moving towards a sound financial position. It is important to note that all thirteen companies have enjoyed the taste of positive profit before tax to net premium ratio during the year 2012-13 which is a good sign to the growth life insurance industry in India .It is confirmed by one-way ANOVA test that there is significant difference in the ratio of profit before tax to net premium across the select life insurance companies under the study. By conducting Tukey HSD post hoc test it has been found that there are three mean comparisons that are significantly different. Analysis also found that the significant differences have arisen mainly because of very high underwriting losses throughout the study period of RELIANCE compared to LICI, SBI LIFE and BAJAJ ALLIANZ which is evident from descriptive statistics.

Premium Prediction

By using the method of least square, it is found that the market share in Net premium of giant LICI is likely to reduce by 5.13% in the year 2017-18 i.e., five years after 2012-13 and this 5.13% will be shared by other life insurance companies provided other things remaining the same.

Comprehensive Ranking Analysis

The study finds that overall profitability performance rank scores of the selected life insurance companies are not consistent under the study period. The Kruskal –Wallis test reveals that there is significant difference in Overall Profitability Performance rank scores across the selected Life Insurance Companies in India.

CHAPTER-4

SOLVENCY ANALYSIS

Ratio of Total Assets to Total Liabilities

Descriptive statistics reveal that the ratio of total assets to total liabilities of ICICI PRUDENTIAL, BIRLA SUN LIFE, HDFC STANDARD, KOTAK MAHINDRA, SBI LIFE, TATA AIA, MAX N Y and LICI has a decreasing trend over the study period and in case of LICI, this ratio is almost fixed from 2003-04 to 2012-13.The study also finds that the average ratio of total assets to total liabilities of ING VYSYA, AVIVA, RELIANCE, PNB MET LIFE and BAJAJ ALLIANZ are above industry average and of rest of the companies are below industry average. It is important to note that this ratio has decreased from 2003-04 to 2011-12 for the life insurance industry which indicates an alarming situation so far as the solvency of Indian life insurance industry is concerned. ANOVA test shows that there is no significant difference in the ratio of total assets to total liabilities across the select life insurance companies.

Ratio of Shareholders' Fund to Minimum Capital for Registration

In respect of capital adequacy over and above minimum capital, the analysis finds that the life insurance companies namely, BAJAJ ALLIANZ, ICICI PRUDENTIAL, MAX N Y and SBI LIFE have done better compared to all other companies under the study and these companies have maintained the ratio above industry average by injecting more capital. The study also finds that these ratios of shareholders' fund to minimum capital for registration of life insurance industry have an increasing trend during the study period. ANOVA test reveals that there is significant difference in the ratio of shareholders' fund to minimum capital for registration across the select life insurance companies under the study. Post hoc test finds that there are ten mean comparisons that are significantly different and that is why the differences have arisen.

Ratio of Shareholders' Fund to Technical Reserve

The analysis has revealed that the ratio of shareholders' fund to technical reserve has a decreasing trend over the study period except 2011-12 and 2012-13 in which years there is a little sign of improvement and this indicates that all the policyholders will not get their full money returned in case of liquidation. Analysis also indicates that the average ratios of selected companies under the study are very poor except AVIVA, ING VYSYA, PNB MET LIFE and RELIANCE whose ratios are above industry average. The study also finds that the ratio of life insurance industry has decreased year by year throughout the study period. ANOVA test reveals that there is no significant difference in the ratio of shareholders' fund to technical reserve across the select life insurance companies under the study.

Ratio of Shareholders' Fund to Total Assets

Descriptive analysis of the ratio of shareholders' fund to total assets appears to be interesting in the sense that more than 89% of the total assets of life insurance industry in India are financed from debt capital. However, in this respect the position of seven select companies namely, ING VYSYA, PNB MET LIFE, RELIANCE, AVIVA, BAJAJ ALLIANZ, SBI LIFE and MAX N Y are better and these companies have maintained their average ratio above industry average. This ratio of life insurance industry has a decreasing trend throughout the study period starting from 2003-04 to 2009-10 and there is slight improvement have been noticed after 2009-10 which is alarming so far as the solvency of the companies are concerned. ANOVA test shows that there is no significant difference in the ratio of shareholders' fund to total assets across the select life insurance companies under the study.

Ratio of Fixed Assets to Total Assets

Descriptive analysis has revealed that the average ratio of fixed assets to total assets is highest in case of MAX N Y and lowest in case of LICI and six companies namely MAX N Y, PNB MET LIFE, HDFC STANDARD, ING VYSYA, TATA AIA and RELIANCE have maintained the ratio above industry average and the ratio of other select companies are below industry average. It is interesting to note that tangibility ratio of the life insurance industry on the average has a decreasing trend throughout the study period. ANOVA test reveals that there is significant difference in the ratio of fixed assets to total assets across the select life insurance companies under the study. The examination of Tukey HSD post hoc analysis reveals that there are two mean comparisons that are significantly different. First, we find that there is an average difference of 0.04702 in the ratio of fixed assets to total assets of MAX N Y and LICI. Second, there is average difference of 0.04128 in the ratio of fixed assets to total assets of MAX N Y and SBI LIFE. That is the reason for significant difference.

Comprehensive Ranking Analysis

There are inconsistent scores achieved by the select life insurance companies for overall solvency performance with respect to the analysis of comprehensive ranking during the study period of ten years taken together.

The Kruskal-Wallis test shows that there is significant difference in overall solvency performance across the life Insurance companies in India.

CHAPTER-5

LIQUIDITY ANALYSIS

Ratio of Current Assets to Current Liabilities

The descriptive analysis of current ratio finds that LICI's liquidity position is far better than any life insurance companies under the study and the average ratio of current assets to current liabilities for ten years study periods of LICI, HDFC STANDARD, SBI LIFE and ING VYSYA are above industry average. It is also ascertained that the liquidity position of the life insurance industry in India has decreased from 2003-04 to 2009-10 and has increased thereafter up to the end of study period as a result of better performance of LICI, HDFC STANDARD and SBI LIFE. ANOVA test finds that there is significant difference in the ratio of current assets to current liabilities across the select life insurance companies under the study.

Tukey's HSD post hoc test finds that there are twelve mean comparisons that are significantly different and the differences have arisen due to better performance of LICI compared to other select life insurance companies during the study period.

Ratio of Current Assets to Total Assets

The descriptive analysis of the ratio of current assets to total assets indicates that the average ratio of ING VYSYA is 0.143 which is much higher compared to rest of the companies under the study. Analysis also reveals that KOTAK MAHINDRA, SBI LIFE, BAJAJ ALLIANZ, LICI, BIRLA SUN LIFE and ICICI PRUDENTIAL have maintained this ratio below industry average and are running through liquidity risks.

So far as the average ratio of life insurance industry is concerned, it has decreased from 0.1559 in 2003-04 to 0.0323 in 2010-11 and thereafter there is slight effort of improvement. ANOVA test shows that there is significant difference in the ratio of current assets to total assets across the select life insurance companies under the study. Examination of post hoc analysis shows that there are three mean comparisons of ING VYSYA with BIRLA SUN LIFE, ING VYSYA with ICICI PRUDENTIAL and ING VYSYA with LICI that are significantly different and that is why the difference has arisen.

Ratio of Cash and Bank Balances to Current Liabilities

Descriptive analysis of the ratio of cash and bank balances to current liabilities reveals that LICI has maintained a healthy quick liquidity ratio throughout the study periods.

Analysis also finds that there are six companies namely, LICI, SBI LIFE, HDFC STANDARD, KOTAK MAHINDRA, ING VYSYS and BIRLA SUN LIFE that have maintained the average ratio above industry average .Analysis also finds that after deterioration in the average ratio of life insurance industry from 2003-04 to 2009-10 , it has started recovering from 2010-11 onwards. ANOVA test reveals that there is significant difference in the ratio of cash and bank balances to current liabilities across the select life insurance companies under the study. Examination of the Tukey HSD post hoc analysis shows that there are seven mean comparisons of AVIVA, BAJAJ ALLIANZ, ICICI PRUDENTIAL, PNB MET LIFE, TATA AIA, MAX N Y AND RELIANCE with LICI that are significantly different.

Ratio of Total Liabilities to Liquid Assets

The descriptive analysis makes it clear that the ratios of total liabilities to liquid assets of BIRLA SUN LIFE, PNB MET LIFE, ING VYSYA, RELIANCE, HDFC STANDARD, KOTAK MAHINDRA, SBI LIFE and LICI are better than other select life insurance companies in India and five companies namely, ICICI PRUDENTIAL, MAX N Y LIFE, TATA AIA BAJAJ ALLIANZ and AVIVA whose performances under the study period are poor and they have maintained their average ratios above industry average. The analysis also reveals that the industry averages have an increasing trend up to 2010-11which is not a good sign for reducing the liquidity risks of the insurance industry in India although it has started recovering from 2011-12. ANOVA test shows that there is significant difference in the ratio of total liabilities to liquid assets across the select life insurance companies under the study. Tukey’s HSD post hoc analysis reveals that there are eight mean comparisons with ICICI PRUDENTIAL that are significantly different and that why the significant difference has arisen.

Comprehensive Ranking Analysis

The comprehensive ranking analysis shows that overall liquidity performance rank scores secured by most of the selected life insurance companies under the study period are not consistent except ING VYSYA, HDFC STANDARD and LICI. Kruskal-Wallis test shows that there is significant difference in overall liquidity performance across the select life insurance companies in India.

CHAPTER-6

OVERALL FINANCIAL PERFORMANCE ANALYSIS

Overall Financial Performance Analysis on the basis of Rank Scores of Profitability, Solvency and Liquidity Ratios taken together

The Comprehensive ranking analysis reveals that AVIVA, MAX N Y, BAJAJ ALLIANZ, KOTAK MAHINDRA and HDFC STANDARD have secured 1st, 2^{nd}, 3^{rd}, 4th and 5^{th} position respectively for overall financial performance during the study period of ten years taken together. The Kruskal –Wallis test reveals that there are differences in overall financial performance across the select life insurance companies during the study period.

Multiple regression analysis of the factors determining overall financial performance of life insurance companies in India:

Findings on the basis of Regression Summary

Independent Variables	Relationship with Financial performance/ ROE(Dependent Variable)	Null hypotheses
Underwriting risks	Significant and Positive	Rejected
Liquidity	Insignificant and Positive	Accepted
Tangibility	Insignificant and Positive	Accepted
Leverage	Significant and Negative	Rejected
Volume of capital	Significant and Negative	Rejected
Size	Significant and positive	Rejected

Analysis shows that there is significant positive relationship of underwriting risk and size with financial performance (ROE) of life insurance companies in India under the study. The study also finds that there is significant negative relationship of volume of capital and leverage with financial performance (ROE). Finally, the study finds insignificant positive relationship of tangibility and liquidity with financial performance (ROE).

Edward I Altman's "Z''-score Analysis Indicating the Overall Financial Health Position of Selected Life Insurance Companies in India

The study indicates that "Z''-score of BAJAJ ALLIANZ and PNB MET LIFE in the year 2003-04 lies in healthy zone/zone of ignorance but during rest of the years under the study, "Z''-scores lie in the unhealthy/bankruptcy zone .In case of all other select companies under the study "Z"-scores lie in the unhealthy/bankruptcy zone throughout the study periods.

Suggestions

The management of concerned life insurance companies is required to take immediate steps for control over operating expenses, benefits paid and policy liabilities for consistency in underwriting income and profit before tax. At the same time IRDA is also required to exercise stringent control over the expenses part of life insurance companies in India for improving profitability. All the life insurance companies under the study are required to inject more capital to improve the solvency position of their companies. The life insurance supervisory authority is also advised to rethink over existing solvency benchmark. It is advised that except LICI all the life insurance companies under the study are to improve their liquidity positions the fact which may be noted by the managers and the regulators keeping in mind the insurance failures in the late 1980s, 1990s and 2000. Overall financial performance of AVIVA, MAX N Y, BAJAJ ALLIANZ, KOTAK MAHINDRA, and HDFC STANDARD taking profitability, solvency and liquidity aspects together is satisfactory as the overall rank scores achieved by these companies are much lower than rest of the companies under the study and the rest of the companies under the study are to perform consistently in respect of solvency and profitability during next decade. All the life insurance companies under the study are to take into consideration the factors that influence their financial performance. All life insurance companies under the study are to improve their financial health by making more profits, by improving liquidity position and by injecting more capital and thus improving “Z’’-score.

Scope for Future Research

This study has been conducted on the basis of accounting information available from financial statements of life insurance companies. However, similar studies may be conducted on the basis of both accounting based and market based information which may provide better insights to both management and regulatory bodies. Studies may also be conducted to find out the impact of sub-component financial statement variables to find out the root cause of poor or better financial performance. Besides, more studies may be undertaken to identify many variables of regulation, supervision and macro economics affecting the financial performance of life insurance companies in India.

Conclusion

The study has led to the conclusion that large volumes of underwriting losses are being incurred by select life insurers in our country. The study also finds that there is a tendency to offset underwriting losses by investment income which is a very risky insurance management practices in India. As a result, life insurance companies are required to pay more attention on efficient underwriting and at the same time, if the insurance regulator makes proper risk management practices mandatory, the situation will improve.

The findings also show that Indian life insurance companies depend too much on outsiders’ fund for their business which is very risky business practices so far as long term solvency is concerned. Here, policyholders’’ money is not safe if the investment markets are not behaving properly. So far as short term solvency or liquidity is concerned, the study has concluded that some life insurance companies under the study have maintained too much liquid assets while other are maintaining too less liquid assets. A balance should be maintained between the two levels to maintain optimum level of liquidity so that it can be beneficial to all the life insurance companies in India. The study reveals that overall financial performance rank scores achieved by all the selected life insurance companies under the study period are not consistent with respect to liquidity, profitability and solvency. Analysis also shows that there is significant positive relationship of underwriting risk and size with financial performance (ROE) of life insurance companies in India under the study. The study also finds that there is significant negative relationship of volume of capital and leverage with financial performance (ROE). Finally, the study finds insignificant positive relationship of tangibility and liquidity with financial performance (ROE).Altman's Z-score analysis has revealed that ''Z''-score of PNB MET LIFE and BAJAJ ALLIANZ for the year 2003-04 lies in zone of ignorance and in rest of the year under the study, "Z"-score lie in the bankruptcy zone. . But in case of all other companies under study, Z-score lies in the unhealthy zone. As the global economies have become cautious of risks involved in corporation's liabilities, the findings of the study may help on timely identification of impending failure and probabilities of default characteristics of Indian life insurance companies.