Size of the Firm and Financial Performance: Evidence from Indian Life Insurance Sector

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Absrtact: *Insurance industries sector in India have taken a colossal shape especially after LPG (Liberalisation, Privatisation and Globalisation) policy and introduction of Insurance Regulatory & Development Authority (IRDA). With the liberalization of the economy, a large number of insurance companies have entered into the market and thereby eroding the market share of all the companies in operations. The industry was liberalized in the year 2000 and presently twenty-four (24) life insurance companies are operating in India (IRDA Annual Report, 2016-17). In this present competitive environment, companies capable of maintaining market share along with sound financial position will benefited over their competitors. The paper makes an attempt to access the financial performance of three life insurance companies operating in India during 2011-2012 to 2016-2017 on the basis of certain parameters relating to profitability, solvency and liquidity.*

Keywords: Life Insurance, Financial Performance, Profitability, Liquidity, Solvency

INTRODUCTION

In the age of LPG (liberalization, privatization and globalization) of Indian Economy, the financial sector plays an important role in the growth and development of the country and life insurance is one of the most important components of the financial sector. The insurance sector differs from other financial services as its principal objective is to spread financial losses(Boyjoo, Ramesh, & Jaunky, 2017). The insurance providers offer diversity of product, protection from risk thereby ensuring financial security (Bawa & Chattha, 2013). Liberalization and privatization of Indian economy led to the emergence of several private players in the Indian economy specially in life insurance industry (Dey, et.al., 2015).To survive in such competitive environment earning profit is a pre-requisite, so the life insurance companies need to concentrate more on their profitability to ensure a smooth growth. In this context, need for maintaining their market share along with a sound financial position are extremely important for the survival and growth of life insurance companies. The present paper makes an attempt to analyze the financial performance of three life insurance companies operating in India viz. ICICI Prudential, PNB MetLife and DHFL Pramerica, during 2011-2012 to 2016-2017.

REVIEW OF LITERATURE

Bawa and Chittha (2013), found that profitability of life insurers is positively influenced by liquidity and size and negatively related with capital. Profitability does not show any relationship with solvency and insurance leverage. Sambasivam and Ayele (2013), concluded that growth, leverage, volume of capital, size and liquidity are identified as most important determinant factors of profitability hence they are positively related. In contrast, liquidity ratio and leverage ratio are negatively but significantly related with profitability. Charumathi (2012), found that profitability of life insurers is positively and significantly influenced by the size and liquidity. The leverage, premium growth and logarithm of equity capital negatively and significantly influenced the profitability of Indian life insurers. Boyjoo, Ramesh and Jaunky (2017), found that five factors influence the profitability of Mauritian life insurers, viz, company size, underwriting risk, sales profitability, operating margin and investment performance (inversely affected profitability). Malik (2011), concluded that ROA is affected positively by size, volume of capital and negatively by leverage and loss ratio. Sisay (2015), found that loss ratio, size of insurance companies, leverage ratio and solvency margin have significant level on profitability of insurance companies operating in Ethiopia and the primary source of data also supports that the above variables has an impact on profitability of insurance companies in Ethiopia. Dey, Adhikari and Bardhan (2015), concluded that there is significant positive relationship of underwriting risk and size with financial performance (ROE) of life insurance companies in India under the study. There is significant negative relationship between volume of capital and leverage with financial performance. Finally, the study reveals insignificant positive relationship of tangibility and liquidity with financial performance (ROE).

OBJECTIVES OF THE STUDY

1. To analyze the profitability of select life insurance companies in India.

2. To analyze the solvency of select life insurance companies in India.

3. To analyze the liquidity of select life insurance companies in India

DATA AND METHODOLOGY

The study is based on secondary data. The present study covers a period of six years, from 2011-2012 to 2016-2017. In order to select three private sector life insurance companies out of twenty-three private sector life insurance companies total net premium of all the companies have been calculated from IRDA report for the period of six years from 2011-2012 to 2016-2017 & their ranks have been determined based on average net premium during the period of study. On the basis of rank these companies are classified into three groups:

A) Large Size

B) Medium Size and

C) Small Size

With the use of stratified random sampling, three companies have been selected taking one from each group developed on the basis of the size of the company.

In this way three private sector life insurance companies, namely ICICI Prudential from large size, PNB MetLife from medium size and DHFL Pramerica from small size companies have been selected for the study.

The various financial tools such as, Liquidity Ratio, Profitability Ratio and Solvency Ratio has been used. Statistical tools such as, mean, standard deviation and one-way ANOVA have been used.

SCOPE OF THE STUDY

Even though there are good number of life insurance companies in India but present study have been confined to three private sector life insurance companies out of twenty three life insurance companies operating in India for a period of six years from 2011-2012 to 2016-2017. The scope of the study confined merely on the quantitative measures of financial performance of private sector life insurance companies. To fulfil the objectives of the study very limited financial ratios such as, liquidity, solvency and profitability ratios have been calculated

LIMITATIONS OF THE STUDY

The present study is confined to three private sector life insurance companies from the period 2011-2012 to 2016-2017 to measure financial performance. Very limited variables are taken for the study. However the researcher has his/her own limitations is each and the present study is not free from the following limitations:

- Generally the secondary data has been collected from many sources. The gap of non-availability of data from one source has been fulfilled by referring to other sources. The limitations of the secondary data are found to be present in the study.
- The data has been taken for a period of six years is from 2011-2012 to 2016-2017 for analysis and interpretation. However it has been restricted to lesser period because of constraint of the time period. Thus uniformity in the analysis of the select companies cannot be made.
- The present study has been taken for three life insurance companies. Other private life insurance companies have been excluded from the present study, so it is very difficult to generalize the findings of the study.

Therefore, the user of the study should take utmost care while using the findings and suggestions.

RESULT AND DISCUSSION

Table 1: Details of Sample Insurance Companies

Insurers	Foreign Partners	Regd. No.	Date of Regd.	Year of Entry In Indian Market	Net Premium collected in 2016-2017 (Rs in Lakhs)
ICICI Prudential	Prudential Corporation Holdings Ltd. UK	105	24.11.2000	2000-01	2215524.77
PNB MetLife	MetLife International Holdings Inc, USA	117	06.08.2001	2001-02	313890.58
DHFL Pramerica	Prudential International Insurance Holdings Ltd. USA	140	27.06.2008	2008-09	108951.56

Table 2: Profit Before Tax to Total Assets of private sector Life Insurance Companies

Year	ICICI Prudential	PNB MetLife	DHFL
2011-2012	0.0197	0.0036	-0.3647
2012-2013	0.0209	0.0047	-0.2716
2013-2014	0.0188	0.0043	-0.0831
2014-2015	0.0157	0.0039	0.0262
2015-2016	0.0169	0.0038	0.0256
2016-2017	0.0143	0.0039	0.0235
Mean	0.0177	0.004	-0.1074
SD	0.0025	0.0004	0.1711

Source: HandBook of Indian Insurance Statistics, IRDA. 2013-2014 and 2016-2017

Table 2 reveals the average and standard deviation of Profit Before Tax to Total Assets of three private sector life insurance companies. Average return is the highest in case of ICICI Prudential and the same is the lowest in case of DHFL. The value of standard deviation for Profit Before Tax to Total Assets is the highest in case of DHFL while the value of standard deviation for Profit Before Tax to Total Assets is the lowest in case of PNB MetLife. Thus, the values of standard deviation of Profit Before Tax to Total Assets of three selected life insurance companies suggests that the volatility is the maximum in case of DHFL while the consistency has been most pronounced in case of PNB MetLife.

Table 3: Result of One Way ANOVA of the Ratio of Profit Before Tax to Total Assets

Sources of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.056	2	.028	2.891	.087
Within Groups	.146	15	.010		
Total	.203	17			

One way ANOVA has been performed to test the hypothesis. The F value has been calculated for ratio of profit before tax to total assets across the three companies under study. The calculated value of F is 2.891 and the corresponding p value is more than 0.05 as is evident from the table 3. Thus, it implies that there is no statistical evidence for significant difference in the profitability represented by the ratio of profit before tax to total assets across the different size of private sector life insurance companies under study.

Table 4: Current Ratio of private sector Life Insurance Companies

Year	ICICI Prudential	PNB MetLife	DHFL
2011-2012	0.5352	0.7739	0.7408
2012-2013	0.6487	0.8758	0.8387
2013-2014	0.5873	0.9901	0.6786
2014-2015	0.6907	0.8608	0.6514
2015-2016	0.6702	0.7985	0.6910
2016-2017	1.0091	1.1924	0.9722
Mean	0.6902	0.9153	0.7621
SD	0.1664	0.1553	0.1223

Source: HandBook of Indian Insurance Statistics, IRDA. 2013-2014 and 2016-2017

Table 4 reveals the average and standard deviation of Current Ratio of three private sector life insurance companies. Average return is the highest in case of PNB MetLife and the same is the lowest in case of ICICI Prudential. The value of standard deviation for Current Ratio is the highest in case of ICICI Prudential while the value of standard deviation for Current Ratio is the lowest in case of DHFL. Thus, the values of standard deviation of Current Ratio of three selected life insurance companies suggests that the volatility is the maximum in case of ICICI Prudential while the consistency has been most pronounced in case of DHFL.

Table 5: Result of One Way ANOVA of the Ratio of Current Assets to Current Liabilities

Sources of Variation	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.159	2	.079	3.563	.054
Within Groups	.334	15	.022		
Total	.492	17			

One way ANOVA has been performed to test the hypothesis. The F value has been calculated for ratio of Current Assets to Current Liabilities across the three companies under study. The calculated value of F is 3.563 and the corresponding p value is more than 0.05 as is evident from the table 5. Thus, it implies that there is no statistical evidence for significant difference in the liquidity represented by the ratio of current assets to current liabilities across the different size of private sector life insurance companies under study.

Table 6: Shareholders Fund to Total Assets of private sector Life Insurance Companies

Year	ICICI Prudential	PNB MetLife	DHFL
2011-2012	0.0691	0.2112	1.3984
2012-2013	0.0644	0.1942	1.3249
2013-2014	0.0611	0.1798	0.9632
2014-2015	0.0520	0.1591	0.6909
2015-2016	0.0508	0.1532	0.5286
2016-2017	0.0514	0.1380	0.4076
Mean	0.0581	0.1726	0.8856
SD	0.0078	0.0274	0.4137

Source: HandBook of Indian Insurance Statistics, IRDA. 2013-2014 and 2016-2017

Table 6 reveals the average and standard deviation of Shareholders Fund to Total Assets of three private sector life insurance companies. Average return is the highest in case of DHFL and the same is the lowest in case of ICICI Prudential. The value of standard deviation for Shareholders Fund to Total Assets is the highest in case of DHFL while the value of standard deviation for Shareholders Fund to Total Assets is the lowest in case of ICICI Prudential. Thus, the values of standard deviation of Shareholders Fund to Total Assets of three selected life insurance companies suggests that the volatility is the maximum in case of DHFL while the consistency has been most pronounced in case of ICICI Prudential.

Table 7: Result of One Way ANOVA of the Ratio of Shareholders Fund to Total Assets

Sources of Variation	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2.412	2	1.206	21.043	.000
Within Groups	.860	15	.057		
Total	3.272	17			

One way ANOVA has been performed to test the hypothesis. The F value has been calculated for ratio of Current Assets to Current Liabilities across the three companies under study. The calculated value of F is 21.043 and the corresponding p value is less than 0.05 as is evident from the table 7. Thus, it implies that there is statistical evidence for significant difference in the solvency represented by the ratio of Shareholders Fund to Total Assets across the different size of private sector life insurance companies under study.

FINDINGS AND CONCLUSION

1. From the profitability point of view, the volatility is the maximum in case of DHFL while the consistency has been most pronounced in case of PNB MetLife.
2. The calculated value of F for ratio of profit before tax to total assets is 2.891 and the corresponding p value is more than 0.05 as is evident from the table 3. So, it implies that there is no statistical evidence for significant difference in the profitability represented by the ratio of profit before tax to total assets across the different size of private sector life insurance companies under study.
3. From Liquidity point of view, the value of standard deviation suggests that the volatility is the maximum in case of ICICI Prudential while the consistency has been most pronounced in case of DHFL.
4. The calculated value of F is 3.563 and the corresponding p value is more than 0.05 as is evident from the table 5. Thus, it implies that there is no statistical evidence for significant difference in the liquidity represented by the ratio of current assets to current liabilities across the different size of private sector life insurance companies under study.
5. From the Solvency point of view, the value of standard deviation suggests that the volatility is the maximum in case of DHFL while the consistency has been most pronounced in case of ICICI Prudential.
6. The calculated value of F is 21.043 and the corresponding p value is less than 0.05 as is evident from the table 7. Thus, it implies that there is statistical evidence for significant difference in the solvency

represented by the ratio of Shareholders Fund to Total Assets across the different size of private sector life insurance companies under study.

Financial performance analysis is the method of identifying the financial strengths and weaknesses of any concern by linking the items of Balance Sheet and Profit & Loss A/C. Measuring the performance of life insurance companies has gained the importance in the country as they helps in channelizing surplus funds to deficit units of the society to support the investment activities in the economy. For measuring Financial Performance, financial ratios such as, Profitability Ratio, Liquidity Ratio and Solvency Ratio have been calculated. Statistical tools such as, mean, standard deviation and one-way ANOVA have also been used. The performance of ICICI Prudential is found best among the other two companies during the period of study. In terms of Liquidity, PNB MetLife is better than the other two companies during the period concerned. From Solvency position, DHFL Pramerica outperformed the other two companies i.e., ICICI Prudential and PNB MetLife. From the result of one-way ANOVA, it is also seen that there is statistical evidence for significant difference in the solvency represented by the ratio of Shareholders Fund to Total Assets across the different size of private sector life insurance companies under study.

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