AN ANALYTICAL STUDY OF PROFITABILITY OF LIFE INSURANCE COMPANIES IN INDIA: A STUDY OF SELECTED PRIVATE SECTOR INSURANCE COMPANIES

Rajiben Solanki  
Research Scholar, Department of Commerce, Saurashtra University  
Rajkot, India  
Email: rajisolanki26@gmail.com

ABSTRACT

Insurance is a means of protection from financial loss. It is a form of risk management primarily used to hedge against the risk of a contingent, uncertain loss. Insurance has been an important part of the Indian financial system. Life insurance in India is a growth oriented industry. In the year 2000, life insurance industry has been liberalized after more than 50 years of monopoly with LIC. During the period of 13 years after liberalization, private life insurances have launched many innovations in the industry and it is at this juncture it has become imperative to study the profitability performance of these companies. Five life insurance companies have been selected for the study.

Keywords: Insurance; Net Premium; Operating Income; Investment Income; F- Test

INTRODUCTION

The life insurance companies have taken its real shape in India when the IRDA has been set up in the year 2000 and the monopoly business right of LIC (Life Insurance Corporation in India) in life insurance is abolished. The Malhotra Committee on the reform in the insurance sector has suggested for co-existence of both the public company and the private companies side by side and the Life Insurance Corporation of India is now facing competition from private Life Insurance Companies. As a result of entry of private life insurance companies in India, the industry has made a speedy growth.

REVIEW OF LITERATURE

Hussain (2010) has evaluated the growth of LIC during post privatization period from 2004-05 to 2008-09 where parameters used are premium, commission, operating expenses etc. and the analysis finds that the increase in commission expenses being lower than the increase in gross premium and other operating expenses compared to premium underwritten is on the higher side.

Gulti and Jain (2011) have studied the comparative performance of all players of Indian life insurance industry relating to agency force, premium income, no. of policies etc. and have found that the entry of private players in life insurance sector has resulted in a drop of market share of LIC.

Manisha modi (2011) has made a study on four non-life insurance companies in India relating to underwriting performance, management soundness, investment performance by analyzing various ratios and the outcome of the study is that the overall management and profitability of all the companies during the study period has improved substantially.

Tiwari (2012) has analyzed the trend of total premium; total no. of policies, total income, market share etc. and the findings reveal that the life insurance industry has made a remarkable growth of premium after the entry of private players and LIC is still better than private life insurance companies.
OBJECTIVE OF THE STUDY

The main objective of the study is to measure and analyze the profitability performance of selected private life insurance companies in India.

HYPOTHESES OF THE STUDY

Ho: There is no significant difference in the ratio of Income from investment to total investment of select life insurance companies in India during the study period.

Ho: There is no significant difference in the ratio of profit before tax to net premium of select life insurance companies in India during the study period.

Ho: There is no significant difference in the ratio of change in policy liabilities to net premium of select life insurance companies in India during the study period.

Ho: There is no significant difference in the ratio of benefits paid to net premium of select life insurance companies in India during the study period.

Ho: There is no significant difference in the ratio of profit after tax to net premium of select life insurance companies in India during the study period.

SAMPLE OF THE STUDY

The universe of the study is all life insurance companies in India. Five life insurance companies namely, AVIVA, BAJAJ ALLIANZ, HDFC STANDARD, ICICI PRUDENTIAL, and SBI LIFE have been selected on the base of convenient sampling method.

PERIOD OF THE STUDY

The researcher has undertaken the study is for 5 years starting from 2010-11 to 2014-15.

SOURCE OF DATA

This study mainly depends on the secondary data that consists of annual report of the private sector life insurance companies.

Tools and Technique

The present study is an analytical study. For the analysis of data in the form of various profitability ratios, the statistical tools like average, ANOVA has been employed.

ANALYSIS AND DISCUSSION

Table 1 shows the ratio of income from investment to total investment of selected life insurance companies for the period of 2010-11 to 2014-15. It is observed that the income from investment to total investment, on average is highest for AVIVA is 22.395 %, and lowest for HDFC is 8.609% during the study period.

<table>
<thead>
<tr>
<th>Year</th>
<th>AVIVA</th>
<th>BAJAJ</th>
<th>HDFC</th>
<th>ICICI</th>
<th>SBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-12</td>
<td>45.55849</td>
<td>-0.10004</td>
<td>0.740855</td>
<td>-0.20142</td>
<td>1.3081</td>
</tr>
<tr>
<td>2012-13</td>
<td>17.33834</td>
<td>7.961988</td>
<td>6.293498</td>
<td>8.382783</td>
<td>8.739583</td>
</tr>
<tr>
<td>Average</td>
<td>22.39547</td>
<td>9.521458</td>
<td>8.609746</td>
<td>9.529793</td>
<td>8.708838</td>
</tr>
</tbody>
</table>

Source: computed from annual reports of selected companies
Table 2. Ratio of profit before tax to net premium (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>AVIVA</th>
<th>BAJAJ</th>
<th>HDFC</th>
<th>ICICI</th>
<th>SBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td>1.225924</td>
<td>11.2965</td>
<td>1.105563</td>
<td>4.752532</td>
<td>3.052871</td>
</tr>
<tr>
<td>2011-12</td>
<td>1.197089</td>
<td>17.63878</td>
<td>2.670086</td>
<td>10.14311</td>
<td>4.618511</td>
</tr>
<tr>
<td>2013-14</td>
<td>2.795926</td>
<td>20.12339</td>
<td>5.364704</td>
<td>11.92219</td>
<td>7.788235</td>
</tr>
<tr>
<td>Average</td>
<td>1.901368</td>
<td>17.12845</td>
<td>3.727624</td>
<td>9.795371</td>
<td>5.883031</td>
</tr>
</tbody>
</table>

Source: computed from annual reports of selected companies

Table 2 shows the ratio of profit before tax to net premium of selected life insurance companies for the period of 2010-11 to 2014-15. It is observed that profit before tax to net premium, on average is highest for BAJAJ is 17.128% and lowest for AVIVA is 1.901% during the study period.

Table 3 shows the ratio of change in policy liabilities to net premium of selected life insurance companies for the period of 2010-11 to 2014-15. It is observed that change in policy liabilities to net premium, on average is highest for BAJAJ is 508.553% and lowest for HDFC is 93.787% during the study period.

Table 3. Ratio of change in policy liabilities to net premium (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>AVIVA</th>
<th>BAJAJ</th>
<th>HDFC</th>
<th>ICICI</th>
<th>SBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td>293.9233</td>
<td>383.623</td>
<td>57.2138</td>
<td>33.61053</td>
<td>103.1391</td>
</tr>
<tr>
<td>2011-12</td>
<td>288.5718</td>
<td>479.6978</td>
<td>72.7745</td>
<td>59.86546</td>
<td>139.7582</td>
</tr>
<tr>
<td>2012-13</td>
<td>330.8651</td>
<td>487.4756</td>
<td>88.61965</td>
<td>82.18978</td>
<td>221.3244</td>
</tr>
<tr>
<td>2013-14</td>
<td>388.7268</td>
<td>575.0201</td>
<td>119.7323</td>
<td>577.5379</td>
<td>251.429</td>
</tr>
<tr>
<td>2014-15</td>
<td>460.6792</td>
<td>617.7998</td>
<td>130.5961</td>
<td>607.0665</td>
<td>257.1234</td>
</tr>
<tr>
<td>Average</td>
<td>352.5532</td>
<td>508.7233</td>
<td>93.78729</td>
<td>272.054</td>
<td>194.5548</td>
</tr>
</tbody>
</table>

Source: computed from annual reports of selected companies

Table 3 shows the ratio of change in policy liabilities to net premium of selected life insurance companies for the period of 2010-11 to 2014-15. It is observed that change in policy liabilities to net premium, on average is highest for BAJAJ is 508.553% and lowest for HDFC is 93.787% during the study period.

Table 4. Ratio of benefits paid to net premium (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>AVIVA</th>
<th>BAJAJ</th>
<th>HDFC</th>
<th>ICICI</th>
<th>SBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td>50.73236</td>
<td>52.05187</td>
<td>31.61353</td>
<td>3.082723</td>
<td>22.15133</td>
</tr>
<tr>
<td>2011-12</td>
<td>60.42569</td>
<td>24.58398</td>
<td>29.09912</td>
<td>2.125234</td>
<td>35.95511</td>
</tr>
<tr>
<td>2012-13</td>
<td>93.10543</td>
<td>28.54942</td>
<td>37.76644</td>
<td>3.99486</td>
<td>72.95203</td>
</tr>
<tr>
<td>2013-14</td>
<td>102.2715</td>
<td>0.390108</td>
<td>38.92571</td>
<td>5.855066</td>
<td>82.6336</td>
</tr>
<tr>
<td>2014-15</td>
<td>98.7485</td>
<td>0.364031</td>
<td>55.29157</td>
<td>5.61329</td>
<td>63.77884</td>
</tr>
<tr>
<td>Average</td>
<td>81.05669</td>
<td>21.18788</td>
<td>38.53927</td>
<td>4.134235</td>
<td>55.49413</td>
</tr>
</tbody>
</table>

Source: computed from annual reports of selected companies

Table 4 shows the ratio of benefits paid to net premium of selected life insurance companies for the period of 2010-11 to 2014-15. It is observed that benefits paid to net premium, on average is highest for AVIVA is 81.056% and lowest for ICICI is 4.134% during the study period.

Table 5 shows the ratio of profit after tax to net premium of selected life insurance companies for the period of 2010-11 to 2014-15. It is observed that the profit after tax to net premium, on average is highest for ICICI is 31.722, and lowest for AVIVA is 1.412% during the study period.
Table 5. Showing Ratio of the ratio of profit after tax to net premium (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>AVIVA</th>
<th>BAJAJ</th>
<th>HDFC</th>
<th>ICICI</th>
<th>SBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-11</td>
<td>1.136378</td>
<td>11.03927</td>
<td>-1.10556</td>
<td>4.604789</td>
<td>2.83783</td>
</tr>
<tr>
<td>2011-12</td>
<td>1.192122</td>
<td>17.63878</td>
<td>2.670086</td>
<td>9.938124</td>
<td>4.249116</td>
</tr>
<tr>
<td>2012-13</td>
<td>0.619432</td>
<td>18.19384</td>
<td>4.009994</td>
<td>11.14931</td>
<td>5.992712</td>
</tr>
<tr>
<td>2013-14</td>
<td>1.946126</td>
<td>17.74084</td>
<td>6.055895</td>
<td>122.1417</td>
<td>6.944947</td>
</tr>
<tr>
<td>Average</td>
<td>1.412493</td>
<td>15.86913</td>
<td>3.390269</td>
<td>31.72277</td>
<td>5.310822</td>
</tr>
</tbody>
</table>

Source: computed from annual reports of selected companies

TESTING OF HYPOTHESIS: ONE WAY ANOVA

1. Incomes from investment to total investment Ratio

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>FCal.</th>
<th>FTab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>711.6577</td>
<td>4</td>
<td>177.9144</td>
<td>2.356703</td>
<td>2.866081</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1509.859</td>
<td>20</td>
<td>75.49293</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2221.516</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. The profit before tax to net premium Ratio

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>FCal.</th>
<th>FTab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>729.9531</td>
<td>4</td>
<td>182.4883</td>
<td>31.39866</td>
<td>2.866081</td>
</tr>
<tr>
<td>Within Groups</td>
<td>116.2395</td>
<td>20</td>
<td>5.811977</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>846.1926</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. The change in policy liabilities to net premium Ratio

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>FCal.</th>
<th>FTab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>497617.8</td>
<td>4</td>
<td>124404.4</td>
<td>5.91305</td>
<td>2.866081</td>
</tr>
<tr>
<td>Within Groups</td>
<td>420779.3</td>
<td>20</td>
<td>21038.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>918397</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. The benefits paid to net premium Ratio

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>FCal.</th>
<th>FTab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>50621.6</td>
<td>4</td>
<td>12655.4</td>
<td>35.34969</td>
<td>2.866081</td>
</tr>
<tr>
<td>Within Groups</td>
<td>7160.119</td>
<td>20</td>
<td>358.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>57781.72</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. The profit after tax to net premium Ratio

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>DF</th>
<th>MS</th>
<th>FCal.</th>
<th>FTab.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>3169.363</td>
<td>4</td>
<td>792.3408</td>
<td>1.534135</td>
<td>2.866081</td>
</tr>
<tr>
<td>Within Groups</td>
<td>10329.48</td>
<td>20</td>
<td>516.474</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13498.84</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above table display the result of the calculation of one-way ANOVA for the ratio of incomes from investment to total investment, profit before tax to net premium, change in policy liabilities to net premium, benefits paid to net premium, profit after tax to net premium of selected life insurance companies. Here, calculated value of F-test is 2.35, 31.40, 5.92, 35.35 and 1.53 respectively. The table value of F-test is at 5% level of significance and where degree of freedom is (4, 20) 2.86. Hence, the calculated value is less than the table value in cases of ratio of income from investment to total investment and profit after tax to net premium. So, null hypothesis (H0) is accepted. It indicates that the difference in income from investment to total investment and profit after tax to net premium is not significant. The calculated value is more than the table value in cases of ratio of Profit before tax to net premium, change in policy liabilities to net premium, benefits paid to net premium. So null hypothesis is rejected in these cases means there is significant.
FINDING OF THE STUDY

1. The analysis of variance indicates that there is no significant difference in the ratio of income from investment to total investment and profit after tax to net premium of selected private life insurance companies during the study period.

2. The study does find any significant difference in the ratio of profit before tax to net premium, change in policy liabilities to net premium and benefits paid to net premium of selected private life insurance companies during the study period.

LIMITATION OF THE STUDY

1. The study covers only five Private sector life insurance companies of India so it may not generalize to whole population.

2. The data which has been used for the study mainly secondary data, so limitation of secondary data remains with it and also applies to this study

3. The study covers only five years.

4. The statistical techniques have their own limitation it also applies to this study.

CONCLUSION

The study has aimed to examine the profitability of life insurance companies. For measuring the profitability of the companies various ratios have been calculated. The private sector life insurance companies should strive to increase its business by issuing more and more policies in order to retain its market share in the competitive scenario.

REFERENCES


