A Comparative Study of Financial Soundness & Liquidity Analysis of Selected Public Sector and Selected Private Sector Non-Life Insurance Companies of India

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ABSTRACT Indian insurance industry was liberalized in January, 2000, with the passage of the IRDA Act. The liberalization was brought about with the objectives to increase coverage of population, better choice of products with informed decisions, promote competition, encourage the entrance and joint partnership of foreign players with the Indian insurers, so as to boost innovation, advance economy of operations, enhance customer centricity and service excellence, improve the efficiency of the public sector companies and above all to create economic activity for the purpose of benchmark growth rate.

Key words: Financial Soundness; Liquidity Analysis

Introduction
The public sector general insurance companies had dominated this segment and had been a monopoly service provider till a decade ago. Consequent to the entry of private sector with collaborations with foreign insurers, the nature of the service had been altered. This study was taken up mainly to assess Financial Soundness & Liquidity Analysis of non-life insurer with regard to the selected public sector non-life insurance companies and selected private sector non-life insurance companies of India.

Objective
The main objective of this paper is to assess Financial Soundness & Liquidity Analysis of non-life insurer with regard to the selected public sector non-life insurance companies and selected private sector non-life insurance companies of India.

Study Units
This Research study for four General Insurance Companies of Public Sectors (1) National Insurance Company (2) The New India Assurance Company (3) United India Insurance Company.
Company Limited (4) The Oriental Fire & General Insurance Co. Ltd. and four Private Sectors non-life Insurance companies having highest business as on 31st March, 2005 (1) Bajaj Allianz General Insurance (2) Tata AIG Insurance company (3) ICICI Lombard GIC Ltd (4) IFFCO-TOKIO General Insurances selected.

**Data Collection**

The study is based mainly on secondary data, collected from annual reports of the general insurance companies in India. Data were also collected from the Handbook on Indian Insurance Statistics, Insurance Handbook published by IRDA and various journals, magazines and websites.

**Period of Study**

The study period is to be converted 7 years; from 2005-06 to 2011-12

**Tools & Techniques**

For the present study, Ratio-Analysis in percentage as an Accounting tools and F-Test ONE WAY ANOVA is used as tools of Statistics.

**Review Of Literature**

**Manjit Singh & Rohit Kumar (2009)** found in their study ‘Emerging Trends in Financial performance of General Insurance Industry in India’ that the entry of private sector Insurance Companies had undoubtedly contributed to the strengthening of general insurance business by creating a competitive atmosphere.

**Shreedevi D and Manimegalai D (2013),** compared public and private sector non-life insurance companies in India for a period of nine years from 2002-03 to 2010-11. The study found that insurers are operating under conditions of shrinking premiums, growing customer expectations, tightening regulations, tougher competition, rising operational costs, etc. The study also found that non-life insurance companies in India were still in a budding stage and performance of The New India Assurance Company, among the general insurance companies studied, was considered as satisfactory.
Rabindra Ghimire (2013), used the CARAMEL model to explore the financial efficiency and health of non-life insurance industry in Nepal for the period 2006-2011 and concluded that, the financial health and efficiency of insurance sector was not sufficient in Nepal. Insurance Regulatory Authority of Nepal should pay proper attention to maintain the financial health of the industry and insurers also must be aware of their financial health and need to be more efficient and effective in their management.

No comprehensive study of the Financial Soundness & Liquidity Analysis of non-life insurer with regard to the selected public sector non-life insurance companies and selected private sector non-life insurance companies of India had been made and this study is an attempt to fill up this gap.

FINANCIAL SOUNDNESS & LIQUIDITY ANALYSIS

An assessment of financial soundness thus needs to take into account both quantitative and qualitative indicators to achieve an acceptable degree of reliability. Researcher has focused on one of the tools for evaluating financial soundness of insurance sectors - financial soundness indicator. It is the goal to identify the most relevant indicators about the financial health and soundness of the selected non-life insurance companies. Financial soundness reveals the stability of the organization by which organization can perform their decision of investment of their fund.

(i) Return on Net Worth

The return on net worth indicates the profitability of the owner’s investments

\[
\text{Return on net worth ratio} = \frac{\text{profit after tax}}{\text{Net worth}} \times 100
\]

Net worth

\[
\text{Net worth} = \text{share capital} + \text{reserve surplus} - \text{intangible assets}
\]
Table 1: Ratio of Profit After Tax and Net Worth of Selected Non-Life Insurance Companies of India

(Period from 2005-06 to 2011-12) (In Percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>NIACL</th>
<th>OFGIL</th>
<th>NICL</th>
<th>UIACL</th>
<th>Bajaj</th>
<th>TATA</th>
<th>IFFCO</th>
<th>ICICI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>4.23</td>
<td>3.44</td>
<td>(1.36)</td>
<td>5.81</td>
<td>18.63</td>
<td>6.82</td>
<td>17.97</td>
<td>3.51</td>
</tr>
<tr>
<td>2006-07</td>
<td>8.63</td>
<td>6.37</td>
<td>5.78</td>
<td>7.78</td>
<td>18.31</td>
<td>8.79</td>
<td>23.04</td>
<td>2.92</td>
</tr>
<tr>
<td>2007-08</td>
<td>6.69</td>
<td>0.10</td>
<td>1.84</td>
<td>7.63</td>
<td>18.38</td>
<td>6.16</td>
<td>33.85</td>
<td>0.68</td>
</tr>
<tr>
<td>2008-09</td>
<td>1.52</td>
<td>(0.89)</td>
<td>(2.98)</td>
<td>8.70</td>
<td>14.15</td>
<td>1.27</td>
<td>5.16</td>
<td>0.16</td>
</tr>
<tr>
<td>2009-10</td>
<td>1.75</td>
<td>(0.44)</td>
<td>2.35</td>
<td>7.90</td>
<td>15.24</td>
<td>1.88</td>
<td>30.34</td>
<td>1.42</td>
</tr>
<tr>
<td>2010-11</td>
<td>(1.77)</td>
<td>0.54</td>
<td>0.77</td>
<td>1.46</td>
<td>5.18</td>
<td>(1.14)</td>
<td>(18.19)</td>
<td>(1.68)</td>
</tr>
<tr>
<td>2011-12</td>
<td>0.78</td>
<td>2.65</td>
<td>3.57</td>
<td>4.58</td>
<td>12.90</td>
<td>(6.36)</td>
<td>(77.84)</td>
<td>(2.11)</td>
</tr>
</tbody>
</table>

Ratio = PAT / Equity Share Capital *100
PAT = Profit After Tax
Net Worth = Share Capital + Reserve Surplus – Fictitious Assets

Analysis for calculated ratio for selected non-life insurance companies
Analysis of PAT with Shareholder’s Fund indicates the proportion of return on Net Worth during research period. By observation of the above table indicates that fluctuation in the ratio during research period. NIACL shows ratio ranging between – 1.77% (2010-11) to 8.63% (2006-07) and shows 0.78% in the last year of research period. OFGIL shows ratio ranging between – 0.89% (2008-09) to 6.37% (2006-07) and goes to 2.65% (2011-12). NICL shows range of ratio between – 2.98% (2008-09) to 5.78 % (2006-07) and shows 3.57 % (2011-12). UIACL shows ratio ranging between 1.46 % (2010-11) to 8.70% (2008-09) and goes to 4.58% (2011-12) UIACL is showing positive ratios during research period. Ratio on Net Worth of all the selected public sector non-life insurer shows
below 10% during research period which indicates that range of ratio on Net worth is comparatively low to the ratio on return on Equity share capital.

Analysis of PAT with Shareholder’s Fund indicates the proportion of return on Net Worth during research period. By observation of the above table indicates the fluctuation in the ratio during research period. BAJAJ shows ratio ranging 5.18 % (2010-11) to 18.63% (2005-06) and shows 12.90% in the last year of research period.

TATA shows ratio ranging between – 6.36% (2011-12) to 8.79% (2006-07). IFFCO showing high fluctuation in the ratio ranging between – 77.84% (2011-12) to 33.85 % (2007-08). ICICI shows ratio ranging between – 2.11 % (201-12) to 3.51 % (2005-06). Only BAJAJ shows positive ratio on net worth during research period ranging mostly between 10% to 20% While remaining research unit of selected private sector non-life insurer showing negative ratios during last two years of research period out of seven years. Ratio of TATA shows average below 10% during research period while IFFCO show very high fluctuation during research period. ICICI also show lower ratio averaging below 5% during research period.

**Statistical Analysis**

H0: All the selected Research unit have equal Return on Net Worth ratio with respect to Profit After Tax and net worth.

H1: All the selected Research unit have unequal Return on Net Worth ratio with respect to Profit After Tax and net worth.

**Table 2:** F’-Test One Way ANOVA for Ratio of Profit After Tax and Net Worth of Selected Public Sector and Selected Private Sector Non-Life Insurance Companies of India

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Square</th>
<th>Degree of Freedom</th>
<th>Mean Sum of Square</th>
<th>Fc</th>
<th>Ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S.S.</td>
<td>1043.29</td>
<td>7</td>
<td>149.0415</td>
<td>0.726555</td>
<td>2.207436</td>
</tr>
<tr>
<td>W.S.S.</td>
<td>9846.449</td>
<td>48</td>
<td>205.1343</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T.S.S.</td>
<td>10889.74</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From the “F” test one way ANOVA Table as calculated above it shows that Calculated value of \( F_c = 0.726555 \) while tabular value of \( F_t = 2.207436 \) which show that calculated value \( F_c \) is lower than tabular value \( F_t \). \( F_t > F_c \) Hence Null Hypothesis is accepted and Alternative Hypothesis is rejected that Return on Net Worth ratio with respect to Profit After Tax and Shareholder’s fund normsisequal for selected public sector and private sector non-life insurance companies.

The analysis of ratios and statistical analysis for Return on Net Worth indicates that all the selected public sector non-life insurer shows below 10% ratio and only UIACL shows positive ratios during research period while all the private insurer shows average ratio ranging between 10% to 20% during research period excepting IFFCO who shows high fluctuation during research period.

**(ii) Liquidity Analysis**

Every business must have sufficient working capital for day to day running of business. This ratio indicates the financial soundness of the business firm in terms of the premium and other revenue generated. For working capital management, Liquidity analysis is of vital importance.

Mismanagement or inadequacy of the working capital would result in failure of the business. The higher the working capital turnover ratio, the lower the total investment; but the profit will be higher. Though a very high turnover in working capital may in some cases show deficiency of working capital for the given volume of business which if allowed persisting would lead to the income of premium and this would adversely affect the profitability. Thus the efficiency of a business firm in managing its working capital can be ascertained by calculating working capital turnover ratio. In the present study, the working capital turnover ratio has been computed by dividing current assets to the current liabilities and multiplied it with hundred.
Table 3: Ratio of Current Assets and Current Liability of Selected Non-Life Insurance Companies of India

(Period from 2005-06 to 2011-12)
(In Percentage)

<table>
<thead>
<tr>
<th>Year</th>
<th>NIACL</th>
<th>OFGIL</th>
<th>NICL</th>
<th>UIACL</th>
<th>Bajaj</th>
<th>TATA</th>
<th>IFFCO</th>
<th>ICICI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>52.87</td>
<td>33.33</td>
<td>38.95</td>
<td>32.93</td>
<td>33.64</td>
<td>36.93</td>
<td>77.94</td>
<td>55.61</td>
</tr>
<tr>
<td>2006-07</td>
<td>51.62</td>
<td>42.04</td>
<td>39.42</td>
<td>30.75</td>
<td>26.30</td>
<td>34.63</td>
<td>67.44</td>
<td>56.54</td>
</tr>
<tr>
<td>2007-08</td>
<td>59.28</td>
<td>39.27</td>
<td>37.40</td>
<td>31.96</td>
<td>28.97</td>
<td>25.87</td>
<td>69.95</td>
<td>46.24</td>
</tr>
<tr>
<td>2008-09</td>
<td>68.80</td>
<td>47.87</td>
<td>39.26</td>
<td>35.52</td>
<td>33.25</td>
<td>44.91</td>
<td>76.74</td>
<td>56.55</td>
</tr>
<tr>
<td>2009-10</td>
<td>71.31</td>
<td>48.35</td>
<td>39.82</td>
<td>38.79</td>
<td>34.35</td>
<td>41.71</td>
<td>73.75</td>
<td>60.78</td>
</tr>
<tr>
<td>2010-11</td>
<td>65.34</td>
<td>39.38</td>
<td>29.28</td>
<td>30.07</td>
<td>26.01</td>
<td>21.82</td>
<td>51.26</td>
<td>49.77</td>
</tr>
<tr>
<td>2011-12</td>
<td>69.41</td>
<td>38.71</td>
<td>21.14</td>
<td>31.85</td>
<td>28.68</td>
<td>17.67</td>
<td>56.47</td>
<td>45.08</td>
</tr>
</tbody>
</table>

Ratio = Current Assets / Current Liabilities * 100

Analysis for calculated ratio for selected public sector non-life insurance companies

Analysis of Liquidity by considering Current Ratio indicates working capital management. Standard Current ratio of any industry for liquidity analysis is 2:1 or 200%. By observation of the above table indicates that average current ratios of all the selected public sector insurer shows below 100% during research period. NIACL shows ratio ranging between 51.62% (2006-07) to 71.31% (2009-10). OFGIL shows ratio ranging between 33.33 % (2005-06) to 48.35% (2009-10). NICL shows ratio ranging between 21.14% (2011-12) to 39.82 % (2009-10). UIACL shows ratio ranging between 30.07 % (2010-11) to 38.79 % (2009-10). From the observation of the ratio of selected public sector non-life insurer, it has not proper liquidity management during research period.

Analysis of Liquidity by considering Current Ratio indicates working capital management. Standard Current ratio of any industry for liquidity analysis is 2:1 or 200%. By observation of the above table indicates that average current ratios of all the selected private sector insurer also shows below 100% during research
period. BAJAJ shows ratio ranging between 26.01% (2010-11) to 34.35% (2009-10). TATA shows ratio ranging between 17.67% (2011-12) to 44.91% (2008-09). IFFCO shows ratio ranging between 51.26% (2010-11) to 77.94% (2005-06). ICICI shows ratio ranging between 45.08% (2011-12) to 60.78% (2009-10). From the observation of the ratio of selected private sector non-life insurer, it has also not proper liquidity management during research period.

### Table 4: “F”-Test One Way ANOVA for Ratio of Current Assets and Current Liability of Selected Public Sector and Selected Private Sector Non-Life Insurance Companies of India

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>Sum of Square</th>
<th>Degree of Freedom</th>
<th>Mean Sum of Square</th>
<th>F&lt;sub&gt;c&lt;/sub&gt;</th>
<th>F&lt;sub&gt;t&lt;/sub&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S.S.</td>
<td>10705.08</td>
<td>7</td>
<td>1529.297</td>
<td>29.61835</td>
<td>2.207436</td>
</tr>
<tr>
<td>W.S.S.</td>
<td>2478.405</td>
<td>48</td>
<td>51.63343</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T.S.S.</td>
<td>13183.48</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Statistical Analysis

H<sub>0</sub>: All the selected Research unit have equal Current Ratio for liquidity Analysis  
H<sub>1</sub>: All the selected Research unit have unequal Current Ratio for liquidity Analysis

From the “F” test one way ANOVA Table as calculated above it shows that Calculated value of F<sub>c</sub> = 29.61835 while tabular value of F<sub>t</sub> = 2.207436 which show that calculated value F<sub>c</sub> is greater than tabular value F<sub>t</sub>. F<sub>c</sub> > F<sub>t</sub> Hence Null Hypothesis is rejected and Alternative Hypothesis is accepted that Current Assets and Current Liability Ratio for Working Capital Management norms is not equal for selected public sector and private sector non-life insurance companies.

**Overall Analysis for current assets to current liability**

The analysis of ratios, graph and statistical analysis for current assets with current liability indicates that all the selected public sector non-life insurer shows average below 100% ratio during research period while all the private insurer also shows average ratio below to 50% during research period which indicates that both selected public sector non-life insurer and private sector non-life insurer are not having better working capital management norms during
research period with reference to current assets to current liability norms.

**Conclusion**

Researcher has considered two parameters for the calculation of financial soundness and liquidity analysis. As discussed earlier there are numerous indicators tools for financial soundness but of which most reliable and most technical tools with reference to insurance industry is considered for this study. It does not mean that other FSI (Financial Soundness Indicators) are less powerful or it has no use at all. But insurance is special kind of business especially non-life insurance sector hence special care is taken for choosing such kind of financial soundness indicators

First indicator for this FSI is return on net worth which is nears below to 10% for selected public sector non-life insurer and nearer to below 20% for selected private sector non-life insurers.

Second indicator for this FSI is liquidity analysis with reference to current assets to current liabilities and standard norms for liquidity is 200% but the entire selected research unit from public sector as well as private sector non-life insurer is showing below to 100% during research period which indicates poor liquidity management for the entire research unit during research period.

From this analysis it is concluded that the entire research unit for define FSI shows average outcomes in compare to standard norms of financial tools of general industries.

**REFERENCE**


