Outline of the Chapter:

I  Return on Capital Employed
   1  Return on Gross Capital Employed
   2  Return on Net Capital Employed
   3  Return on Shareholders’ Equity

II  Appropriation of Profit
   1  Different forms of Appropriation
      1.1  Transfers to General Reserve
      1.2  Transfer to Specific Reserve
      1.3  Transfer to Revenue Reserve
      1.4  Transfer to Capital Reserve
      1.5  Dividends
   2  Ratio of Income From Interest, Rent and Dividend to Total Income
   3  Conclusion
Investment in any business is made with a view to obtain return on capital employed. Therefore by comparing profit with capital employed, overall profitability of a business firm can be measured. To compare profit with capital employed, return on gross profit employed ratio, return on net profit employed ratio, return on share holders' equity and earnings per share should be examined. Along with it, for studying appropriation of profit, dividend-payout ratio and retained earnings should also be examined. All these ratios can present overall a better picture about return on capital employed and appropriation of profit. Return on capital employed provides a true test of profitability related with all types of fund.

Now the researcher shall discuss concept of return on capital employed, appropriation of profit and calculate various ratios related with these for the selected private sector life insurance companies by applying ‘F’ test.
I - Return on Capital Employed:

The primary objective of making investment in any business is to obtain adequate return on capital invested. Therefore, to measure the overall profitability of the relationship between profit and capital employed and is calculated in percentage by dividing the net-profit by capital employed.\(^1\)

\[
\text{Return on Capital Employed (ROI)} = \frac{\text{Net Profit (Before Interest and tax)}}{\text{Gross Capital Employed}} \times 100
\]

Alternatively, it can be also calculated as:

\[
\text{Return on Capital Employed (ROI)} = \text{Assets Turnover} \times \text{Profit margin}
\]

\[
= \frac{\text{Net Premium}}{\text{Total Assets}} \times \frac{\text{Net Premium}}{\text{Sales}} \times 100
\]

Hence, net profit means the profit earned by capital employed. It is the net profit before interest and tax. Capital employed means ‘gross capital employed’ and ‘net capital employed’. Gross capital employed means the total assets used in the business. Net capital employed means total assets minus current liabilities.

The return on capital employed provides a test of profitability related to the long-term funds. The higher the ratio, the more effective and efficient would be the utilization of capital or vice-versa. The comparison of this ratio with that of similar firms and with industry average over a

The researcher has made an attempt to calculate return on capital employed under following heads.
1. Return on Gross capital Employed

2. Return on Net capital Employed

3. Return on Shareholders’ Equity or Net worth ratio

1. **Return on Gross Capital Employed:**

   Gross capital employed is the total fixed assets and current assets. Alternatively, it is the quantum of liabilities plus shareholders’ equity. It is calculated by dividing net profit (before interest and tax) by gross capital employed.\(^2\) Formula for calculating return on gross capital employed ratio is as below

   \[
   \text{Return on Gross Capital Employed Ratio} = \frac{\text{Net Profit (Before Interest and tax)}}{\text{Gross Capital Employed}} \times 100
   \]

   The return on gross capital employed ratio indicates how well management has used the funds supplied by creditors and owners. The higher the ratio, the more efficient is the use of funds by a company.

   The following table 7.1 and chart 7.1 represent the return on gross capital employed of the selected fertilizers companies under study.
Table 7.1
Chart - 7.1
Table 7.1 shows that the return on gross capital employed ratio of SBI Life Insurance Co. Ltd. has shown a mixed trend during 2003-04 to 2012-13. It was -0.19 percent during 2003-04, which increased to 0.1 percent in 2007-08, decreased to -0.06 percent during 2008-09, again increased to 0.23 percent during 2010-11, again decreased to -0.16 percent during 2011-12 and increased to 0.17 percent during 2012-13. The return on gross capital employed has more than 0.20 percent during 2009-10 to 2010-11.

The return on gross capital employed in Bajaj Allianz Life Insurance Co. Ltd. has shown a fluctuating trend during 2003-04 to 2012-13. It was negative during the year 2003-04 to 2008-09. Thereafter it increased to 1.12 percent in 2011-12 and again declined to 0.71 percent during 2012-13. The return on gross capital employed has an average of 0.75 percent during 2009-10 to 2012-13.

Max Newyork Life Insurance Company Ltd. has shown a mixed trend during 2003-04 to 2012-13. It shows negative during 2003-04 to 2009-10. Thereafter increased to 0.48 percent in 2011-12 and again declined to 0.38 percent during 2012-13. The return on gross capital employed has an average of 0.32 percent during 2012-13.

The return on gross capital employed in Reliance Life Insurance Co. Ltd. has shown a fluctuating trend during 2003-04 to 2012-13. It was negative during the year 2003-04 to 2010-11. Thereafter it increased to 0.74 percent in 2011-12 and again declined to 0.59 percent during 2012-13. The return on gross capital employed has an average of 0.70 percent during 2011-12 to 2012-13.

ING Vysya Life Insurance Company Ltd. has shown a rising trend during 2003-04 to 2006-07 then it shows an increasing trend. It shows negative during 2003-04 to 2011-12. Thereafter increased to 0.04 percent in 2012-13 which was the highest during the study period.
Birla Sun Life Insurance Company Ltd. has shown a mixed trend during 2003-04 to 2009-10. It shows negative during 2003-04 to 2009-10. Thereafter increased to 0.61 percent in 2012-13. The return on gross capital employed has an average of 0.50 percent during 2010-11 to 2012-13.

ICICI Prudential Life Insurance Company Ltd. has shown a mixed trend during 2003-04 to 2012-13. It shows negative during 2003-04 to 2011-12. Thereafter increased to 1.06 percent in 2012-13. The return on gross capital employed has an average of 0.32 percent during 2012-13 which was the highest during the study period.

The return on gross capital employed in HDFC Standard Co. Ltd. has shown a fluctuating trend during 2003-04 to 2010-11 and thereafter it increased to 0.23 percent in 2012-13. The return on gross capital employed has an average of 0.20 percent during 2011-12 to 2012-13.

TATA AIA Life Insurance Company Ltd. has shown a decreasing trend during 2003-04 to 2009-10. It shows negative during 2003-04 to 2009-10. Thereafter increased to 0.6 percent in 2011-12 and again declined to 0.54 percent during 2012-13. The return on gross capital employed has an average of 0.25 percent during 2010-11 to 2012-13.

Met Life Insurance Company Ltd. has shown an decreasing trend during 2003-04 to 2005-06 and then it increased to 0.07 percent in 2009-10 thereafter it decreased to -0.07 percent in 2011-12 and increased to 0.03 percent in 2012-13. The return on gross capital employed has an average of 0.05 percent during 2007-08 to 2009-10 and 2012-13.

From above discussion, it can be said that during 2003-04 to 2012-13, the return on gross capital employed ratio was the highest in Bajaj Allianz and followed by ICICI Prudential, Reliance, Birla Sun Life,
TATA AIA, Max Newyork, SBI, HDFC Standard, Met and ING Vysya respectively. So, financial performance of Bajaj Allianz, with special reference to gross capital employed ratio can be said the best, in compared to ICICI Prudential, Reliance and Birla Sun Life.

So far as the satisfactory rate of return is concerned, the lowest rate is that which would be paid on capital raised externally to finance the project. “Brown and Howard have favored a return of 17 percent.”

No one has maintained this standard during 2003-04 to 2012-13.

🏠 ‘F’ TEST

\[ H_0 \] is that the variance arose in the proportion of Return on gross capital Employed ratio over the years and among the various companies does not differ significantly.

\[ H_1 \] is that the variances arose in the proportion of Return on gross capital Employed ratio over the year and among the various companies differ significantly.

The table 7.1.1 represents the ‘F’ test in insurance companies under study.

<table>
<thead>
<tr>
<th>SOURCE OF VARIATION</th>
<th>Sum of Squares</th>
<th>d.f.(V)</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between companies</td>
<td>0.49</td>
<td>3.00</td>
<td>0.16</td>
<td>0.05</td>
</tr>
<tr>
<td>Between Years</td>
<td>25.73</td>
<td>5.00</td>
<td>5.15</td>
<td>1.51</td>
</tr>
<tr>
<td>Residual</td>
<td>51.21</td>
<td>15.00</td>
<td>3.41</td>
<td></td>
</tr>
<tr>
<td>Total S.S</td>
<td>76.94</td>
<td>23.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Between companies, table Value of F-test = 2.76 at 5% level.
Between years, table Value of F-test = 2.76 at 5% level.

1) The calculation value (0.05) of F-test between companies is lower than table value of (2.76), So H₀ is accepted.
2) The calculation value (1.51) of F-test between years is lower than table value of (2.76), So H₀ is accepted.

2. **Return on Net Capital Employed:**

   Net capital employed is the total of fixed assets plus current assets minus current liability. The only difference between the gross capital employed and the net capital employed is that in gross capital employed, from total assets, current liabilities are not deducted, which in net capital employed, current liabilities are deducted from the gross capital employed. Return on net capital employed ratio is calculated by dividing the net profit (before interest and taxes) by the net capital employed.

   \[
   \text{Return on Net Capital Employed Ratio} = \frac{\text{Net Profit (Before Interest and tax)}}{\text{Net Capital Employed}} \times 100
   \]

   A continuous rise in the ratio indicates better and better utilization of net capital employed and a decline in the ratio suggests an adverse

   The following table 7.2 and chart 7.2 represent the ratio of return on net capital employed in the selected private sector life insurance companies.
Table 7.2
Chart - 7.2
Table 7.2 shows that the return on net capital employed ratio of SBI Life Insurance Co. Ltd. has shown a mixed trend during 2003-04 to 2012-13. It was -0.46 percent during 2003-04, which decreased to -2.14 percent in 2004-05, increased to 0.1 percent during 2005-06, again decreased to -0.07 percent during 2006-07, again increased to 0.05 percent during 2008-09 and decreased to -0.69 percent during 2009-10 and again increased to 0.27 percent in 2012-13. The return on net capital employed ratio in SBI was more than 0.25 percent during 2011-12 to 2012-13, indicating bright future for the company.

The return on net capital employed ratio in Bajaj Allianz Life Insurance Co. Ltd. has shown a fluctuating trend during 2003-04 to 2012-13. It was negative during the year 2003-04. Thereafter it increased to 2.28 percent in 2004-05 and again declined to -5.04 percent during 2005-06 and again increased to 0.52 percent in 2007-08 and again declined to -1.58 percent in 2009-10 then again increased to 9.96 percent in 2011-12. The return on net capital employed ratio of Bajaj Allianz was more than 9.00 percent during 2010-11 to 2011-12, indicating the best overall profitability and efficiency of the company.

Max Newyork Life Insurance Company Ltd. has shown a mixed trend during 2003-04 to 2012-13. It shows negative during 2003-04 to 2006-07. Thereafter increased to 15.59 percent in 2007-08 and again declined to -1.89 percent during 2012-13. The return on net capital employed ratio of Bajaj Allianz was more than 15.00 percent during 2007-08, indicating the best overall profitability and efficiency of the company.

The return on net capital employed in Reliance Life Insurance Co. Ltd. has shown a fluctuating trend during 2003-04 to 2012-13. It was negative during the year 2003-04 to 2007-08. Thereafter it increased to 17.88 percent in 2008-09 and again declined to -3.62 percent during
2011-12. The return on net capital employed ratio of Reliance was more than 17.00 percent during 2008-09, indicating the best overall profitability and efficiency of the company.

ING Vysya Life Insurance Company Ltd. has shown a fluctuating trend during 2003-04 to 2012-13. It shows negative during 2003-04 to 2008-09. Thereafter increased to 4.69 percent in 2009-10 and again decreased during the year 2010-11 to 2011-12 and again increased to 0.13 percent in 2012-13. The return on net capital employed ratio in SBI was more than 4.00 percent during 2009-10, indicating bright future for the company.

Birla Sun Life Insurance Company Ltd. has shown a declined trend during 2003-04 to 2004-05. It shows negative during 2003-04 to 2004-05, 2007-08 and 2010-11 to 2012-13. The return on net capital employed ratio in BSLI was more than 12.30 percent during 2005-06 to 2006-07 and 2008-09 to 2009-10, indicating the best overall profitability and efficiency of the company.

ICICI Prudential Life Insurance Company Ltd. has shown a mixed trend during 2003-04 to 2012-13. It was more than 10.00 percent in 2003-04, 2006-07 and 2008-09 which indicates the best overall profitability and efficiency of the company.

The return on net capital employed in HDFC Standard Co. Ltd. has shown a fluctuating trend during 2003-04 to 2012-13. It was the highest 28.86 percent in 2010-11 which indicates the best overall profitability and efficiency of the company.

TATA AIA Life Insurance Company Ltd. has shown a decreasing trend during 2003-04 to 2009-10. It shows negative during 2003-04, 2005-06, 2008-09 and 2009-10 to 2011-12. Thereafter increased to 7.32 percent in 2012-13. The return on net capital employed was more
than 7.00 percent during the year 2006-07 to 2007-08, 2009-10 and 2012-13, which indicates the best overall profitability and efficiency of the company.

Met Life Insurance Company Ltd. has shown an decreasing trend during 2003-04 to 2005-06 and then it shows mixed trend during the remaining years. It increased to 0.17 percent in 2006-07 thereafter it decreased to -0.34 percent in 2007-08 and increased to 0.4 percent in 2008-09 and again decreased to -0.38 percent in 2009-10 and again increased to 1.07 percent in 2010-11.

From above discussion, it can be said that during 2003-04 to 2012-13, the return on net capital employed ratio was the highest in Birla Sun Life and followed by ICICI Prudential, HDFC Standard, TATA AIA, Reliance, Max Newyork, Bajaj Allianz ING Vysya, Met and SBI respectively. So, financial performance of Birla Sun Life can be said the best, with special reference to return on net capital employed ratio.

**‘F’ TEST**

**H₀** is that the variance arose in the proportion of Return on net capital employed ratio over the years and among the various companies do not differ significantly.

**H₁** is that the variances arose in the proportion of Return on net capital employed ratio over the year and among the various companies differ significantly.

The table 7.2.1 represents the ‘F’ test in insurance companies under study.
Table 7.2.1
‘F’ test for Return on net capital employed ratio
(From 2003-04 to 2012-13)

<table>
<thead>
<tr>
<th>SOURCE OF VARIATION</th>
<th>Sum of Squares</th>
<th>d.f.(V)</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between companies</td>
<td>870.94</td>
<td>3.00</td>
<td>290.31</td>
<td>0.27</td>
</tr>
<tr>
<td>Between Years</td>
<td>858.03</td>
<td>5.00</td>
<td>171.61</td>
<td>0.16</td>
</tr>
<tr>
<td>Residual</td>
<td>16281.48</td>
<td>15.00</td>
<td>1085.43</td>
<td></td>
</tr>
<tr>
<td>Total S.S</td>
<td>17139.51</td>
<td>23.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Between companies, table Value of F-test = 2.76 at 5% level.
Between years, table Value of F-test = 2.76 at 5% level.

1) The calculation value (0.27) of F-test between companies is lower than table value of (2.76), So H₀ is accepted.
2) The calculation value (0.16) of F-test between years is lower than table value of (2.76), So H₀ is accepted.

3. Return on Shareholders’ Equity or Net worth:

“This ratio is also known as ‘Return on Proprietors’ funds’. This ratio expresses the percentage relationship between net profit (after interest and tax) and proprietors’ funds or shareholders investment.”⁴ It is used to ascertain the earning power of shareholders’ investment. Formula for calculating return on shareholders’ equity is as below.

\[
\text{Return on Shareholders’ Equity} = \frac{\text{Net Profit (After Interest and tax)}}{\text{Net Capital Employed}} \times 100
\]

or Net worth Ratio
Here, Shareholders' funds include preference share capital as well as equity shareholders' fund which in turn comprise equity share capital, share premium and reserve and surpluses. The shareholders equity also refer to the "Net Worth' of a company. The net profits are after deducting interest and tax but before deducting dividends on preference shares. It is the final income that is available for distributaries as dividends to shareholders.

“This ratio indicates how well the firm has used the resources of the owners. The earning of satisfactory return is the most desirable objective of a business, and this ratio indicates the extent to which this objective has been achieved successfully.”

The following table 7.3 and chart 7.3 represent the ratio of Return on Shareholders’ Equity or Net Worth of the selected private sector life insurance companies.

Table 7.3 shows that the return on Shareholders’ equity or net worth ratio of SBI Life Insurance Co. Ltd. has shown a mixed trend during 2003-04 to 2012-13. It was -0.46 percent during 2003-04, which decreased to -2.14 percent in 2004-05, increased to 0.1 percent during 2005-06, again decreased to -0.07 percent during 2006-07, again increased to 0.05 percent during 2008-09 and decreased to -0.69 percent during 2009-10 and again increased to 0.27 percent in 2012-13. The return on Shareholders’ equity or net worth ratio in SBI was more than 0.25 percent during 20011-12 to 2012-13, indicating bright future for the company.
Table 7.3
Chart - 7.3
The return on Shareholders’ equity or net worth ratio in Bajaj Allianz Life Insurance Co. Ltd. has shown a fluctuating trend during 2003-04 to 2012-13. It was negative during the year 2003-04. Thereafter it increased to 2.28 percent in 2004-05 and again declined to -5.04 percent during 2005-06 and again increased to 0.52 percent in 2007-08 and again declined to -1.58 percent in 2009-10 then again increased to 2.55 percent in 2012-13. The return on Shareholders’ equity or net worth ratio of Bajaj Allianz was more than 2.00 percent during 2004-05 and 2012-13, indicating the best overall profitability and efficiency of the company.

Max Newyork Life Insurance Company Ltd. has shown a mixed trend during 2003-04 to 2012-13. It shows negative during 2003-04 to 2006-07. Thereafter increased to 15.59 percent in 2007-08 and again declined to -1.89 percent during 2012-13. The return on Shareholders’ equity or net worth ratio of Bajaj Allianz was more than 15.00 percent during 2007-08, indicating the best overall profitability and efficiency of the company.

The return on Shareholders’ equity or net worth ratio in Reliance Life Insurance Co. Ltd. has shown a fluctuating trend during 2003-04 to 2012-13. It was negative during the year 2003-04 to 2007-08. Thereafter it increased to 17.88 percent in 2008-09 and again declined to -3.62 percent during 2011-12. The return on Shareholders’ equity or net worth ratio of Reliance was more than 17.00 percent during 2008-09, indicating the best overall profitability and efficiency of the company.

ING Vysya Life Insurance Company Ltd. has shown a fluctuating trend during 2003-04 to 2012-13. It shows negative during 2003-04 to 2008-09. Thereafter increased to 4.69 percent in 2009-10 and again decreased during the year 2010-11 to 2011-12 and again increased to 0.13 percent in 2012-13. The return on Shareholders’ equity or net
worth ratio in ING Vysya was more than 4.00 percent during 2009-10, indicating bright future for the company.

Birla Sun Life Insurance Company Ltd. has shown a declined trend during 2003-04 to 2004-05. It shows negative during 2003-04 to 2004-05, 2007-08 and 2010-11 to 2012-13. The return on Shareholders’ equity or net worth ratio in BSLI was more than 12.30 percent during 2005-06 to 2006-07 and 2008-09 to 2009-10, indicating the best overall profitability and efficiency of the company.

ICICI Prudential Life Insurance Company Ltd. has shown a mixed trend during 2003-04 to 2012-13. It was more than 10.00 percent in 2003-04, 2006-07 and 2008-09 which indicates the best overall profitability and efficiency of the company.

The return on Shareholders’ equity or net worth ratio in HDFC Standard Co. Ltd. has shown a fluctuating trend during 2003-04 to 2012-13. It was the highest 28.86 percent in 2010-11 which indicates the best overall profitability and efficiency of the company.

TATA AIA Life Insurance Company Ltd. has shown a decreasing trend during 2003-04 to 2009-10. It shows negative during 2003-04, 2005-06, 2008-09 and 2009-10 to 2011-12. Thereafter increased to 7.32 percent in 2012-13. The return on net capital employed was more than 7.00 percent during the year 2006-07 to 2007-08, 2009-10 and 2012-13, which indicates the best overall profitability and efficiency of the company.

Met Life Insurance Company Ltd. has shown a decreasing trend during 2003-04 to 2005-06 and then it shows mixed trend during the remaining years. It increased to 0.17 percent in 2006-07 thereafter it decreased to -0.34 percent in 2007-08 and increased to 0.4 percent in
2008-09 and again decreased to -0.38 percent in 2009-10 and again increased to 1.07 percent in 2010-11.

From above discussion, it can be said that during 2003-04 to 2012-13, the return on Shareholders’ Equity or net worth ratio was the highest in Birla Sun Life and followed by ICICI Prudential, HDFC Standard, TATA AIA, Reliance, Max Newyork, Bajaj Allianz ING Vysya, Met and SBI respectively. So, financial performance of GNFC can be said the best, with special reference to return on Shareholders’ equity or net worth.

侈‘F’ TEST

\( H_0 \) is that the variance arose in the proportion of Return on Shareholder equity ratio over the years and among the various companies does not differ significantly.

\( H_1 \) is that the variances arose in the proportion of Return on Shareholder equity ratio over the year and among the various companies differ significantly.

The table 7.3.1 represents the ‘F’ test in insurance companies under study.

Table 7.3.1

‘F’ test for Return on Shareholder equity ratio

(From 2003-04 to 2012-13)

<table>
<thead>
<tr>
<th>SOURCE OF VARIATION</th>
<th>Sum of Squares</th>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Between companies, table Value of F-test = 2.76 at 5% level.
Between years, table Value of F-test = 2.76 at 5% level.

1) The calculation value (0.27) of F-test between companies is lower than table value of (2.76), So H\textsubscript{0} is accepted.
2) The calculation value (0.16) of F-test between years is lower than table value of (2.76), So H\textsubscript{0} is accepted.

II – Appropriation of Profit:

This applies to only divisible profits, i.e. to profits remaining after all charges against the current income have been taken into account. Once a surplus that can be shared by various parties is established, the question of its disposal arises. “The directors may decide to retain a certain amount to strengthen the company’s finance and the shareholders will appreciate a share in the shape of dividends.”\textsuperscript{6} The amount retained may take the form of transfer to various reserves or just a balance left.

1. Different Forms of Appropriation:

The amount retained may take the form of transfer to various reserve or just a balance left, namely:-

1.1 Transfers to General Reserve
1.2 Transfer to Specific Reserve
1.3 Transfer to Revenue Reserve:
1.4 Transfer to Capital Reserve
1.5 Dividends

1.1 Transfers to General Reserve:

A portion of profits in a particular year may be transferred to a reserve designed to meet any unforeseen contingency in future such as
trading losses or financial stringency or for expansion of business. Such reserves are general reserves. ‘General Reserve’ and ‘Contingency Reserve’ practically mean the same thing.

1.2 Transfers to Specific Reserve

Specific reserves, as the term signifies, are meant for certain specific purposes. An example of specific reserves is Dividend Equalization Reserve, the purpose of which is to see that dividends paid by the company in future are so far as possible uniform. If in a year the profit of the company is low, the dividend Equalization Reserve could be used to maintain the dividend at the desired level.

1.3 Transfer to Revenue Reserve:

Revenue reserve means any reserve other than a capital reserve. In other words, revenue reserve includes any amount regarded as free for distribution through the profit and loss account.

1.4 Transfer to Capital Reserve:

If a company decides that part of the profits shall not be available for dividend, the profit will be called capital reserve. Capital reserves are built out of capital profits as against ordinary trading or revenue profits.

2. Ratio of Income from Interest, Rent and Dividend to Total Income:

Income from investment (from interest, rent and dividend) is important element of income than premium in insurance business. The ratio of investment income to total income will be an indicator of profit achievement or profit target to be achieved.

The investment income to total income indicates the management’s ability to earn sufficient income on investment not only to cover
revenue operating expenses of the business but also to have a sufficient margin to pay reasonable compensation to shareholders contribution to the firm. A consistency high ratio will indicate the effective and efficient operation of business.\textsuperscript{7}

The ratio of income from interest, rent and dividend to total income are given under. The ratio of investment income to total income in above table 7.4 in SBI Life Insurance Co. Ltd. remained stable at the first five years during the study period. It was around 0.04 percent in 2003-04 to 2007-08, which increased to 0.09 percent in 2008-09 and decreased to 0.05 percent in 2009-10 then it increased to 0.18 percent in 2012-13. However, the investment income increased. The reason for increase in the yield can be attributed to increase the interest rates.

In Bajaj Allianz Life Insurance Co. Ltd. the income of investment to total income registered fluctuating trend during study period. The ratio was 0.01 percent during the year 2003-04 to 2005-06 and 2007-08, which increased slightly to 0.05 percent in 2008-09. Then it was decreased to 0.03 percent in 2009-10, which increased at a rocketing speed in 2011-12 to 2012-13 to 0.17 percent. It represented the improvement in investment management.

The above table represent that the ratio of investment income to total income highest in 2001-05 in Max Newyork Life Insurance Co. Ltd. which was 0.02 percent in 2003-04. Thereafter the ratio shows increasing trend during the next three year of the study period. It was 0.03 percent in 2007-08 which went up to 0.09 percent in 2011-12. Thereafter it was slightly decreased to 0.08 percent in 2012-13. The ratio of investment income to total income in Reliance Life Insurance Co. Ltd. also remained stable around 0.02 percent trend during the year 2003-04 to 2009-10 then it increased to 0.08 percent in 2012-13.
Table 7.4
The ratio of investment income to total income in ING Vysya Life Insurance Co. Ltd. witnessed upward trend during the year 2003-04 to 2008-09, thereafter it decreased to 0.05 percent in 2009-10 and again increased to 0.15 in 2012-13.

In Birla Sun Life Insurance Co. Ltd. the income of investment to total income registered an increasing trend during the year 2003-04 to 2006-07 then it shows mixed trend. The ratio was 0.11 percent in 2010-11, which increased slightly to 0.16 percent in 2011-12. It represented the improvement in investment management.

The above table represent that the ratio of investment income to total income highest in 2006-07 in ICICI Prudential Life Insurance Co. Ltd. which was 0.39 percent. The ratio shows mixed trend during the year 2003-04 to 2012-13. It was more 0.22 percent in 2003-04, 2006-07 and 2012-13. It represented the improvement in investment management.

The ratio of investment income to total income in HDFC Standard Life Insurance Co. Ltd. also witnessed mixed trend during the study period. The ratio was the highest 0.71 percent in 2012-13 which represented the improvement in investment management.

The ratio of investment income to total income in TATA AIA Life Insurance Co. Ltd. witnessed an increasing trend during the study period. It ranged between 0.02 percent to 0.17 percent. It represented the improvement in investment management.

In Met Life Insurance Co. Ltd. the income of investment to total income registered fluctuating trend during study period. The ratio was 0.01 percent in 2003-04, which increased slightly to 0.03 percent in 2006-07. Then it decreased to 12.60 percent in 2003-04, which increased at a rocketing speed in 2004-05 to 0.02 percent in 2007-08 and increased to 0.05 percent in 2008-09 and again decreased to 0.03 percent in 2009-10 then it increased to 0.15 percent in 2012-13. It represented the improvement in investment management.
The inter firm comparison of investment income to total income represents that the ratio was almost shows increasing trend in all the companies during the study period. The volume of investment income to total income ratio shows highest in ICICI Prudential and followed by SBI, TATA AIA, Birla Sun Life, ING Vysya, Met, Bajaj Allianz, HDFC Standard, Max Newyork and Reliance respectively.

‘F’ TEST

H₀ is that the variance arose in the proportion of Interest; rent and dividend ratio over the years and among the various companies does not differ significantly.

H₁ is that the variances arose in the proportion of Interest; rent and dividend ratio over the year and among the various companies differ significantly.

The table 7.4.1 represents the ‘F’ test in insurance companies under study.

Table 7.4.1

‘F’ test for Interest; rent and dividend to net income ratio

(From 2003-04 to 2012-13)

<table>
<thead>
<tr>
<th>SOURCE OF VARIATION</th>
<th>Sum of Squares</th>
<th>d.f.(V)</th>
<th>Mean Square</th>
<th>F Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between companies</td>
<td>0.07</td>
<td>3.00</td>
<td>0.02</td>
<td>1.68</td>
</tr>
<tr>
<td>Between Years</td>
<td>0.61</td>
<td>5.00</td>
<td>0.12</td>
<td>9.30</td>
</tr>
<tr>
<td>Residual</td>
<td>0.20</td>
<td>15.00</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>Total S.S</td>
<td>0.81</td>
<td>23.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Between companies, table Value of F-test = 2.76 at 5% level.

Between years, table Value of F-test = 2.76 at 5% level.
1) The calculation value (1.68) of F-test between companies is lower than table value of (2.76), So $H_0$ is accepted.

2) The calculation value (9.30) of F-test between years is more than table value of (2.76), So $H_1$ is accepted.

3. Conclusion:

The ratio related with return on capital employed as well as ratio of income from interest, rent and dividend to total income can present a better picture about return on capital investment (ROI) and appropriation of profitability and provide a test of profitability, related with all type of funds.

The return on gross capital employed ratio was the highest in Bajaj Allianz and followed by ICICI Prudential, Reliance, Birla Sun Life, TATA AIA, Max Newyork, SBI, HDFC Standard, Met and ING Vysya respectively during 2003-04 to 2012-13. So, financial performance of Bajaj Allianz, with special reference to gross capital employed ratio can be said the best, in compared to ICICI Prudential, Reliance and Birla Sun Life.

So far as the satisfactory rate of return is concerned, the lowest rate is that which would be paid on capital raised externally to finance the project. No one has maintained this standard during 2003-04 to 2012-13.

Application of F test for analyzing gross capital employed ratio was not significant between the companies and over the years, so $H_0$ is accepted and $H_1$ is rejected.

The return on net capital employed ratio was the highest in Birla Sun Life and followed by ICICI Prudential, HDFC Standard, TATA AIA, Reliance, Max Newyork, Bajaj Allianz ING Vysya, Met and SBI respectively during 2003-04 to 2012-13. So, financial
performance of GNFC can be said the best, with special reference to return on net capital employed ratio.

Application of F test for analyzing net capital employed ratio was not significant between the companies and over the years, so $H_0$ is accepted and $H_1$ is rejected.

It can be said that, the return on Shareholders’ Equity or net worth ratio was the highest in Birla Sun Life and followed by ICICI Prudential, HDFC Standard, TATA AIA, Reliance, Max Newyork, Bajaj Allianz ING Vysya, Met and SBI respectively during 2003-04 to 2012-13. So, financial performance of Birla Sun Life can be said the best, with special reference to return on Shareholders’ equity or net worth.

Application of F test for analyzing Shareholders’ Equity or net worth ratio was not significant between the companies and over the years, so $H_0$ is accepted and $H_1$ is rejected.

The inter firm comparison of investment income to total income represents that the ratio was almost shows increasing trend in all the companies during the study period 2003-04 to 2012-13. The volume of investment income to total income ratio shows highest in ICICI Prudential and followed by SBI, TATA AIA, Birla Sun Life, ING Vysya, Met, Bajaj Allianz, HDFC Standard, Max Newyork and Reliance respectively.

Application of F test for analyzing investment income to total income ratio was not significant between the companies, so $H_0$ is accepted and $H_1$ is rejected. However, it was significant over the years, so $H_0$ is rejected and $H_1$ is accepted.
References:


3. Ibid, p. 55

4. Ibid, p. 65

5. Ibid, p. 73.


7. www.irdajournal.com