A Comparative Study on Equity and Debt Funds in ULIPs at Reliance Nippon Life Insurance Private Limited

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ABSTRACT

The Indian Corporate sector is facing the challenge in commensuration of the risk involved with the expected level of the return. In this scenario of fluctuating capital market, the risk level never payoff with the returns.

A ULIP is the ideal investment vehicle for today's complex and modern financial scenario because it does not require an investor to do a continuous tracking of each script and have a lot of information about the financial markets and then also it gives decent returns. Whereas markets for Equity shares, Bonds and other fixed income instruments, Real Estates, Derivatives and other assets have become mature information driven price changes in these assets are driven by global events occurring in far away places. A typical individual is unlikely to have the knowledge, skills, inclination and time to keep track of events, understand their implications and act speedily. An individual also finds it difficult to keep track of ownership of his assets, investments, brokerage dues and bank transactions EST. A ULIP is the answer for all these situations.

But there being so many ULIPS companies offering similar plans that an investor needs to be careful regarding his/her investment adjust by not picking up the right company he may land up losing some bucks that may have earned by investing in the right company.

KEYWORDS: Risk, Returns, Sharp Value

INTRODUCTION

ULIPS: UNIT LINKED INSURANCE PLAN:

As per IRDAI guidelines, "ULIPS (Unit Linked Insurance Plans) is a product offered by insurance companies which gives the investors both insurance and investment under a single integrated plan".

Under ULIPS, funds of the investor are managed in two ways...1. Equity Fund & 2. Debt Fund.

Equity Fund: Here the investor amount is purely invested in equity market such as investing in shares, i.e. Equity shares, Preference shares etc. by doing the functioning of changing the ownership of the shares.

Debt Fund: They are invested in Fixed income security bonds, Treasury bills, Guilt funds, Liquid funds etc. It includes investing various funds in short term, medium and long term.

Thereby the amount collected by the fund manager has been invested in different categories.

Under Equity funds:

1. Mid cap fund
2. Equity Growth fund
3. Life Equity fund


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Debt Funds:

1. Corporate Bond fund
2. Gilt fund
3. Money Market fund

NEED FOR THE STUDY:

The Study is to compare the performance levels of the different selected funds of Equity & Debt at Reliance Nippon Life Insurance Company Limited.

SCOPE OF THE STUDY:

The study mainly focus on comparing of various selected funds of Equity and Debt funds with reference to Reliance Nippon Life Insurance. The study is done for a period of past 5 years

OBJECTIVES OF THE STUDY:

1. To study the performance of various selected funds in Equity and Debt funds at Reliance Nippon Life Insurance Company Limited.
2. To analyse the average rate of returns and risk of Equity and Debt funds at Reliance Nippon Life Insurance Company Limited.
3. To rank the different funds in Equity and Debt funds based on Sharpe Index Ratio at Reliance Nippon Life Insurance Company Limited.
METHODOLOGY:
Source of data
Secondary Data:
The study is based on the secondary data which is collected from the annual reports of Reliance Nippon Life Insurance, Company website (www.reliancenipponlife.com).

LIMITATIONS OF THE STUDY:
1. The study is confined to Reliance Nippon Life Insurance Pvt. Ltd., Ananthapur only.
2. The study is limited for a period of 5 years i.e., 2014-2015 to 2018-2019.

HYPOTHESIS
To know whether there is any difference between equity and debt funds of Reliance Nippon Life Insurance Company.
- Ho: null hypothesis
  The Equity and Debt funds of Reliance Nippon Life Insurance Company are not similar in nature.
- H1: alternative hypothesis
  The Equity and Debt funds of Reliance Nippon Life Insurance Company are similar in nature.

DATA ANALYSIS
RETURNS OF LIFE MIDCAP FUND

<table>
<thead>
<tr>
<th>YEAR</th>
<th>RETURNS(X)</th>
<th>X-x</th>
<th>(X-x)^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>7.30</td>
<td>-1.762</td>
<td>3.1046</td>
</tr>
<tr>
<td>2016</td>
<td>9.59</td>
<td>0.528</td>
<td>0.2788</td>
</tr>
<tr>
<td>2017</td>
<td>42.42</td>
<td>33.358</td>
<td>1112.7562</td>
</tr>
<tr>
<td>2018</td>
<td>-10.54</td>
<td>-19.602</td>
<td>384.2384</td>
</tr>
<tr>
<td>2019</td>
<td>-3.46</td>
<td>-12.522</td>
<td>156.8005</td>
</tr>
<tr>
<td>TOTAL</td>
<td>45.31</td>
<td>1657.1786</td>
<td></td>
</tr>
</tbody>
</table>

MEAN (x) = 45.31/5 = 9.062

STANDARD DEVIATION = \sqrt{\frac{\sum (X-x)^2}{N}}
= \sqrt{\frac{1657.1786}{5}}
= 18.2054

Sharpe RATIO = \frac{\text{AVG RETURN ON PORTFOLIO - Rf}}{\text{STANDARD DEVIATION}}

= \frac{9.062-6.90}{18.2054}
= 0.1187

INTERPRETATION: Life Mid-cap fund has a average rate of returns of 9.062 with a higher risk of 18.2054 and with a Sharpe ratio of 0.1187 which is Second among all the equity funds.

RETURNS OF EQUITY GROWTH FUND

<table>
<thead>
<tr>
<th>YEAR</th>
<th>RETURNS(X)</th>
<th>(X-x)</th>
<th>(X-x)^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>2.48</td>
<td>-4.908</td>
<td>24.088</td>
</tr>
<tr>
<td>2016</td>
<td>8.84</td>
<td>1.452</td>
<td>2.108</td>
</tr>
<tr>
<td>2017</td>
<td>15.57</td>
<td>8.182</td>
<td>66.945</td>
</tr>
<tr>
<td>2018</td>
<td>1.69</td>
<td>-5.698</td>
<td>32.47</td>
</tr>
<tr>
<td>2019</td>
<td>8.36</td>
<td>0.972</td>
<td>0.945</td>
</tr>
<tr>
<td>TOTAL</td>
<td>36.94</td>
<td>126.556</td>
<td></td>
</tr>
</tbody>
</table>

MEAN (X) = 36.94/5 = 7.388

STANDARD DEVIATION = \sqrt{\frac{\sum (X-x)^2}{N}}
= \sqrt{\frac{126.556}{5}}
= 5.031

Sharpe RATIO = \frac{\text{AVG RETURN ON PORTFOLIO - Rf}}{\text{STANDARD DEVIATION}}

= \frac{7.388-6.90}{5.031}
= 0.096

INTERPRETATION: The Equity Growth fund has a average rate of returns of 7.388 and with a risk of 5.031, the Sharpe ratio is 0.096 which stood Last in ranking among equity funds.

RETURNS OF LIFE EQUITY FUND

<table>
<thead>
<tr>
<th>YEAR</th>
<th>RETURNS(X)</th>
<th>X-x</th>
<th>(X-x)^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0.35</td>
<td>-7.982</td>
<td>63.71</td>
</tr>
<tr>
<td>2016</td>
<td>4.72</td>
<td>-3.612</td>
<td>13.05</td>
</tr>
<tr>
<td>2017</td>
<td>30.31</td>
<td>21.978</td>
<td>483.03</td>
</tr>
<tr>
<td>2018</td>
<td>-2.08</td>
<td>10.412</td>
<td>108.41</td>
</tr>
<tr>
<td>2019</td>
<td>8.36</td>
<td>0.028</td>
<td>0.001</td>
</tr>
<tr>
<td>TOTAL</td>
<td>41.66</td>
<td>668.20</td>
<td></td>
</tr>
</tbody>
</table>

MEAN (X) = 41.66/5 = 8.332

INTERPRETATION: The Life Mid-cap fund has a average rate of returns of 9.062 with a higher risk of 18.2054 and with a Sharpe ratio of 0.1187 which is Second among all the equity funds.
STANDARD DEVIATION = $\sqrt{\frac{\sum (X-x)^2}{N}}$

$= \sqrt{\frac{668.20}{5}}$

$= 11.56$

Sharpe RATIO = \frac{\text{AVG RETURN ON PORTFOLIO}- Rf}{\text{STANDARD DEVIATION}}

$= \frac{8.332-6.90}{11.56}$

$= 0.1239$

LIFE EQUITY FUND

INTERPRETATION: Life Equity fund average rate of returns is 8.332 and risk is 11.56. The Sharpe ratio is 0.1239 which is in First place according to ratio.

RETURNS OF CORPORATE BOND FUND

<table>
<thead>
<tr>
<th>YEAR</th>
<th>RETURNS(X)</th>
<th>X-x</th>
<th>(X-x)^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>6.62</td>
<td>-1.006</td>
<td>1.012</td>
</tr>
<tr>
<td>2016</td>
<td>13.54</td>
<td>5.942</td>
<td>35.3074</td>
</tr>
<tr>
<td>2017</td>
<td>3.29</td>
<td>-4.308</td>
<td>18.5589</td>
</tr>
<tr>
<td>2018</td>
<td>5.87</td>
<td>-1.728</td>
<td>2.986</td>
</tr>
<tr>
<td>2019</td>
<td>8.67</td>
<td>1.072</td>
<td>1.1492</td>
</tr>
<tr>
<td>TOTAL</td>
<td>37.99</td>
<td></td>
<td>58.958</td>
</tr>
</tbody>
</table>

MEAN (x) = 37.99/5=7.598

STANDARD DEVIATION = $\sqrt{\frac{\sum (X-x)^2}{N}}$

$= \sqrt{\frac{58.958}{5}}$

$= 3.4339$

Sharpe RATIO = \frac{\text{AVG RETURN ON PORTFOLIO}- Rf}{\text{STANDARD DEVIATION}}

$= \frac{7.598-6.90}{3.4339}$

$= 0.20$

CORPORATE BOND FUND

INTERPRETATION: In Corporate bond fund, average rate of return is 7.598 and with a risk of 3.433. The Sharpe ratio is 0.20 which stood second among the debt funds.

RETURNS OF GILT FUND

<table>
<thead>
<tr>
<th>YEAR</th>
<th>RETURNS(X)</th>
<th>X-x</th>
<th>(X-x)^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>6.82</td>
<td>-1.006</td>
<td>1.012</td>
</tr>
<tr>
<td>2016</td>
<td>14.27</td>
<td>6.444</td>
<td>41.53</td>
</tr>
<tr>
<td>2016</td>
<td>1.65</td>
<td>-6.176</td>
<td>38.143</td>
</tr>
<tr>
<td>2017</td>
<td>6.41</td>
<td>-1.146</td>
<td>2.005</td>
</tr>
<tr>
<td>2018</td>
<td>9.98</td>
<td>2.154</td>
<td>4.64</td>
</tr>
<tr>
<td>TOTAL</td>
<td>39.13</td>
<td></td>
<td>87.33</td>
</tr>
</tbody>
</table>

MEAN (x) = 39.13/5=7.826

STANDARD DEVIATION = $\sqrt{\frac{\sum (X-x)^2}{N}}$

$= \sqrt{\frac{87.33}{5}}$

$= 4.179$

Sharpe RATIO = \frac{\text{AVG RETURN ON PORTFOLIO}- Rf}{\text{STANDARD DEVIATION}}

$= \frac{7.826-6.90}{4.179}$

$= 0.2216$

GILT FUND
### INTERPRETATION: Gilt fund has an average rate of returns of 7.826 and a risk of 4.179 which is first among all the debt funds with a Sharpe ratio of 0.2216

### RETURNS OF MONEY MARKET FUND

<table>
<thead>
<tr>
<th>YEAR</th>
<th>RETURNS(X)</th>
<th>X-x</th>
<th>(X-x)^2</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>7.80</td>
<td>1.722</td>
<td>2.965</td>
</tr>
<tr>
<td>2016</td>
<td>7.21</td>
<td>1.132</td>
<td>1.28</td>
</tr>
<tr>
<td>2017</td>
<td>5.62</td>
<td>-0.458</td>
<td>0.21</td>
</tr>
<tr>
<td>2018</td>
<td>4.29</td>
<td>-1.788</td>
<td>3.196</td>
</tr>
<tr>
<td>2019</td>
<td>5.47</td>
<td>-0.608</td>
<td>0.369</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30.39</td>
<td></td>
<td>8.02</td>
</tr>
</tbody>
</table>

**MEAN (x) = 30.39/5=6.078**

**STANDARD DEVIATION = \( \sqrt{\frac{\sum (X-x)^2}{N}} \)**

\[
= \sqrt{\frac{8.02}{5}} = 1.26
\]

**Sharpe RATIO = \( \frac{\text{AVG RETURN ON PORTFOLIO} - \text{RF}}{\text{STANDARD DEVIATION}} \)**

\[
= \frac{6.078-6.9}{1.26} = 0.65
\]

**T-Test** (DataSet1)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palr 1 EQUITY</td>
<td>8.2520</td>
<td>5</td>
<td>12.52467</td>
<td>5.60120</td>
</tr>
<tr>
<td>DEBT</td>
<td>7.0820</td>
<td>5</td>
<td>3.17268</td>
<td>1.41887</td>
</tr>
</tbody>
</table>

**Paired samples Correlations**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Correlation</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palr 1 EQUITY &amp; DEBT</td>
<td>5</td>
<td>-.452</td>
<td>.445</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the difference</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
</table>

At 0.05 level of significance, we accept null hypothesis (that equity and debt are not similar) and reject alternative hypothesis. df = 4 the table value at 0.05 level of significance is 2.776 which is greater than the calculated value, so we reject alternative hypothesis and accept null hypothesis.

**FINDINGS IN EQUITY FUNDS**

- The returns of Mid cap fund(9.062) is higher when compared to others equity funds like Life Equity fund(8.332), Equity Growth fund(7.388), for the past 5 consecutive years i.e., 2015-2019
- The Risk is least in Equity Growth Fund (5.031), moderate in Life Equity Fund (11.56) and high in Mid Cap Fund (18.2054).
IN DEBT FUNDS

- The risk is higher in Gilt fund (4.179) compared to Corporate Bond fund (3.4339), and Money Market fund (1.26).
- Gilt Fund returns are higher (7.826) than Corporate Bond fund (7.598) and Money Market fund (6.078) for the past 5 years i.e., from 2015 to 2019.

SUGGESTIONS

- For conservative Investors; the Debt funds like Gilt Funds and Corporate Bond fund would be suggestible in Reliance Nippon Life Insurance Company as it consists of low risk 4.1, 3.4 respectively.
- Risk takers would opt for Equity funds as they give better returns in long term with above average risk.
- Debt funds like Gilt funds is given more priority than Corporate Bond fund, and Money Market fund. It gives moderate returns with low risk from Sharpe Ratio point of view.
- In Equity funds; it is shown that Life Equity fund has high Sharpe Ratio, which enables the investors to opt to for a high return with above average risk.
- Equity growth fund has better average rate of returns with moderate risk; where it can motivate to conservative investors to invest in Equity funds also.
- Investors can also switch to equity funds from debt funds especially Life Equity fund as it gives better returns when compared to Gilt Fund in Reliance Nippon Life Insurance Company with low risk and a higher rate of returns.

CONCLUSION

From the above the study, it is observed that the high performance fund is Life Equity fund compared to all other equity funds in Reliance Nippon Life Insurance Company.

The Gilt fund has high performance than all other Debt funds in Reliance Nippon Life Insurance Company.

To obtain better returns from ulips investor has to stay for a minimum of 5 years.

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WEBSITES:

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