An Analytical Investigation on Financial Forecasting and Performance Analysis of HDFC Life Insurance

R.Saminathan

Head Department of Commerce, Bharathidasan University Constitute College, Perambalur, India

N.Rajesh

Research Scholar

K.Mohamed Jasim

Assistant Professor, Swami Vivekananda Institute of Management, Thanjavur, India

Abstract

The main objective of the study is to find out financial performance of HDFC Life insurance, for the period of 2005-2012. Further the study also involve in analyzing the liquidity position, ascertain profitability of HDFC, analyze the short term and long term solvency position of the life insurance. The researcher predicts the financial stability of HDFC life. The research methodology used in the study is descriptive research the method of data collection is secondary data is collected the annual reports from the HDFC Life. The analysis of the data is done by using simple statistical tools of ratio analysis and it is represented by means of chart. The liquidity position of the concern is positive. The company has maintained the current assets and current liabilities position effectively which means the current ratio is above the required ratio of 2:1. The liquid ratio and cash ratio of HDFC LIFE insurance are favorable and the organization can very well meet its current obligation. The profitability of the company is comfortable, which means that the company is making more profit, which are the basic requirements very effectively and properly maintained. It may be concluded that the organization's overall financial performance is good.

1. Introduction

Financial statements are eagerly awaited by investors, bankers and some other concerns. For them, it is the only source of information on a company they are interested in. By studying these statements, they can find out how well or bad the company has performance in the past year. Besides, these statements help them uncover the problems faced by the company and identify actions to be taken to safeguard their own interest. But it is very difficult to understand the picture painted by the accounts just by looking at them. Some companies publish annual reports running into 100 or more pages. The accounts are therefore, summarized and analyzed. Trends are spotted and future forecasted. How it is done is the subject matter of this hub. In simple words, analysis means "breakup.", just like dismantling. An analyst would deconstruct the statements, or carry out reverse-engineering process, in order to make deeper sense of business performance. HDFC Standard Life Insurance Incorporated in Aug, 2000 HDFC Standard life is one of the leading private life insurance companies in India. HDFC Standard Life is a joint venture between HDFC- India's housing finance company and Standard plc – United Kingdom's savings and investment Company.

HDFC Ltd. holds 72.43% and Standard Life (Mauritius Holding) Ltd. holds 26% of equity in the joint venture while the rest is owned by others. HDFC Standard Life Insurance Company Ltd. is one of India's leading private insurance companies, which offers a range of individual and group insurance solutions. HDFC has wide distribution network with 568 branches and has over 200000 Financial Consultants. The total premium earned for the half year ended September 30, 2010 was Rs 35,909 million. The profit after tax for the same period is Rs 646 million. There have been 1,298 death claims during the period out of which 1,045 claims were settled and 45 claims were rejected. The company participated in the Great Places to Work® study for the first time and ranked first in the insurance category. HDFC Standard Life's YoungStar Super has been voted 'Product of the Year 2010' in the 'Insurance' category by more than 30,000 consumers nationwide across 36 markets. HDFC Standard Life has received the CIO 'The Ingenious 100 - 2009 Award,' for ATLAS (Agency Training Licensing and Servicing System) HDFC Standard Life has received the Diamond EDGE Award 2009 for its mobile workforce portal - Consultant Corner. EDGE - Enterprises Driving Growth and Excellence (using IT) is an initiative by the ,Network Computing magazine to identify, recognize, and honor end-user companies in India that have demonstrated the best use of technology to solve a business problem, improve business competitiveness, and deliver quantifiable ROI to stakeholders.

2. Review of Literature

Kirikal and **et al.** (2004), suggested that Banks and other financial institutions are a unique set of business firms whose assets and liabilities; regulatory restrictions, economic functions, and operating make them an important subject of research. Banks' performance monitoring, analysis and control needs special analysis in respect to their operation, productivity and performance results from the viewpoint of different audiences, like investors/owners, regulators, customers/clients, and management themselves. In this paper, productivity change in Estonian banking is estimated using the Malmquist productivity index. The data used in this study covers the period from 1999 to 2002.

Penman and **et al** (2004), explained that a financial statement analysis that combines a large set of financial statement items into one summary measure which indicates the direction of one-year-ahead earnings changes. Positions are taken in stocks on the basis of this measure during the period 1973–1983, which involve canceling long and short positions with zero net investment. The two-year holding-period returns to the long and short positions are in the order of 12.5%. After adjustment for 'size effects' the return is about 7.0%. These returns cannot be explained by nominated firm risk characteristics.

Christine (2010), explained that In today's information technology world, real time financial data is readily available via many financial websites, such as MSN Money, Google Finance, Yahoo Finance, etc. The incorporation of computer technology in finance classes has

become more popular than ever in this information technology rich environment. Mediated classrooms have rapidly grown in numbers throughout the universities worldwide.

3.1 Research Methodology

For effective presentation of the study, Secondary data have been used. The researcher used Secondary data from research journals, HDFC life insurance website and RBI website. In this research study researcher has analyze the balance sheet of the HDFC life insurance by using MS Excel.

3.2 Objectives of the Study

1. To analyze the financial performance of HDFC Life insurance, for the period of 2003-2010 by using ratio and comparative balance sheet analysis
2. To assess the liquidity and profitability position of HDFC.
3. To analyze the Risk position of the HDFC life insurance company
4. To study about the growth of insurance

3.3 Hypotheses

1. There is no significant difference between the gross profit and net profit.
2. There is a relationship between gross profit and net profit.
3. There is no difference between the fixed assets turn over and working capital turnover ratio.
4. There is a relationship between fixed assets turn over and working capital turnover ratio.

3.4 Scope of the Study

This study mainly focuses on the financial analysis and capital structure of HDFC Life for more than seven years from the financial years i.e. 2003-2004 to 2009-2010 are analyzed by the researchers in this study. It provides an overview of financial analysis and measures the effectiveness of the various aspects of financial position and also gives an overview of performance of HDFC Life. The study attempts to review the origin and growth of HDFC Life in India. Profit and Loss account, Balance sheet and some of the important key ratios are taken for financial management analysis. The Net Profit, Cash to Total Deposit, Fixed Assets and turnover ratios has also been analyzed.

3.5 Scope for Further Study

Further study on this can be made in the following areas:

1. Determine of profitability of HDFC Life an economic analysis.
2. A comparative study of the working capital management of Government and Private Life Insurance in India.

3.6 Limitation of the Study

The study is subject to the following limitation.

1. This study is restricted to only in Thiruchirapalli Area.
2. This study is restricted to a period of seven years from 2003-2004 to 2010-2010 only.

3. It took much time for getting information from the management because of their busy schedule.

4. Data Analysis and Interpretation

Table 4.1 - Ratio Analysis

Year	Gross Profit	Net Profit Ratio	Profit Earning Ratio	Current Ratio	Cash To Total Ratio	Cash To Total Deposit Ratio	Cash To Demand Deposit Ratio	Total Assets Turnover Ratio	Equity Ratio	Provision Ratio
2003-04	9.09	1.53	3.543	6.8	0.104	0.093	0.142	0.79	0.0092	0.115
2004-05	8.99	1.59	3.013	10.4	0.086	0.083	0.120	0.8	0.0067	0.148
2005-06	9.28	1.44	2.124	9.6	0.086	0.072	0.123	0.8	0.0060	0.102
2006-07	11.32	16.04	1.851	7	0.094	0.059	0.124	0.077	0.0004	0.106
2007-08	11.78	1.51	1.585	9	0.100	0.075	0.134	0.790	0.0035	0.150
2008-09	13.44	15.38	1.092	9	0.110	0.124	0.146	0.079	0.0026	0.123
2009-10	11.08	1.64	1.234	11	0.041	0.094	0.123	0.811	0.0023	0.124
2010-11	10.88	17.09	0.973	10	0.135	0.092	0.178	0.803	0.0020	0.092

Source: Annual Reports of the HDFC Life from 2003-2004 to2010-2011

Table 4.1 - Ratio Analysis (Cont...d)

Year	Fixed Assets Turn Over Ratio	Working Capital Turnover	Return on Total Resources	Operating Exp Ratio	Equity Multip Ratio
2003-04	0.54	0.917	1.20	2.43	107.86
2004-05	0.59	0.839	1.29	2.61	148.55
2005-06	0.71	0.888	1.18	2.82	165.96
2006-07	0.07	0.088	1.25	34.03	234.73
2007-08	0.89	0.819	1.19	3.55	285.65
2008-09	0.08	0.085	1.22	37.90	375.74
2009-10	0.85	0.838	1.33	31.9	430.84
2010-11	1.03	0.854	1.42	32.10	485.99

Source: Annual Reports of the HDFC Life from 2003-2004 to2010-2011

Table 4.2   Forecasting Method   (Moving Average)

Year	Net profit Ratio	Current Ratio	Cash to Total Deposits Ratio	Working Capital Turn Over Ratio	Return on Total Resources Ratio
2011-12	11.37	10.00	0.103	0.592	1.323
2012-13	10.03	10.33	0.095	0.761	1.357
2013-14	12.83	10.11	0.096	0.735	1.367
2014-15	11.41	10.15	0.098	0.696	1.349
2015-16	11.42	10.20	0.096	0.731	1.357

Source: Annual Reports of the HDFC Life from 2003-2004 to2010-2011

Inference

From the above table inferred that the annual forecasting for the year 2011-2016, for the net profit ratio in the year 2013-2014 is 12.83 crores increased and the year 2012-2013 the Net Profit is 10.03 and Forecast based on moving average method the current ratio from the year 2011-2016 is more than 10 the reason is that the company has utilized the funds in proper way in the year 2012-2013. The researcher came to know that the total deposit for the year 2011-2012 is 0.103 is slightly decrease to 0.096 in the year 2015-2016 A variant to this forecasting is call money to cash in the numerator. Forecast based on moving average method The working capital turnover ratio has been increased from 0.592 to 0.731. An increase in working capital indicates that the business has either increased current assets (that it has increased its receivables or other current assets) or has decreased current liabilities—for example has paid off some short-term creditors. Return on Total Resource Ratio has been increased gradually from 1.323 to 1.357 except in the year 2014-15. It shows that the bank has increased the resources of the company reveals that during 2011there has been an increase in cash & balances with RBI of 9,617.54. Advances have relatively increased by 34,152.08 and balance with bank, money at call has relatively decreased by 9,891.09. Investments have increased by Rs.12, 321.75. The other assets have increased by 8,645.93.

Table 4.3 Correlations Between Grossprofit And Netprofit

(Rs. in crs.)

YEAR	GROSS PROFIT	NET PROFIT (Y)	X2	Y2	XY
2003	9.09	1.53	82.62	2.34	13.91
2004	8.99	1.59	80.82	2.52	14.29
2005	9.28	1.44	86.11	2.07	13.36
2006	11.32	16.04	128.14	257.28	181.57
2007	11.78	1.51	138.76	2.28	17.78
2008	13.44	15.38	180.63	236.54	206.7
2009	11.08	1.64	122.76	2.68	18.17
2010	10.88	17.09	118.37	292.06	185.9
	85.86	56.22	938.27	797.77	651.68

$$r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{[\,n\sum x^2 - (\sum x)^2\,]\,[\,n\sum y^2 - (\sum y)^2\,]}}$$

Equation for correlation coefficient

Here n = 8

$$\sum x = 85.86 \,, \quad \sum y = 56.22 \,, \quad \sum xy = 651.68 \,, \quad \sum x^2 = 938.27 \,, \quad \sum y^2 = 797.77$$

$$R = \frac{386.4}{657.4} = \mathbf{0.587}$$

Inference

Here, table 4.21 shows positive correlation between Gross profit ratio and Net profit ratio. Both correlations between -1 to +1.

Table 4.5 DIFFERENCE BETWEEN GROSS PROFIT AND NET PROFIT

Null Hypothesis (H$_o$): There is no difference between Gross Profit and Net Profit

Alternative Hypothesis (H$_1$): There is a difference between Gross Profit and Net Profit

T-Test Calculation

YEAR	FIXED ASSETS TURN OVER RATIO (X)	WORKING CAPITAL TURN OVER RATIO (Y)	X2	Y2	XY
2003	0.54	0.917	0.29	0.84	0.495
2004	0.59	0.839	0.35	0.70	0.495
2005	0.71	0.888	0.50	0.79	0.630
2006	0.07	0.088	0.00049	0.007	0.0006
2007	0.89	0.819	0.79	0.67	0.729
2008	0.008	0.085	0.0064	0.007	0.006
2009	0.85	0.838	0.72	0.70	0.712
2010	1.03	0.854	1.061	0.73	0.879
	4.76	5.328	3.72	4.44	3.95

$$T_{cal} = \frac{(\overline{X}_1 - \overline{X}_2) - (\mu_1 - \mu_2)}{S\overline{X}_1 - \overline{X}_2}$$

$$S_1 = \sqrt{\frac{\sum (X_1 - \overline{X1})^2}{n_1 - 1}} \qquad S_2 = \sqrt{\frac{\sum (X_2 - \overline{X_2})^2}{n_2 - 1}}$$

$$S = \frac{(n_1 - 1) S_1^2 - (n_2 - 1) S_2^2}{N_1 + n_2 - 2}$$

$\infty = 0.05$ Here n = 8

Inference: From the above table no. Inferred that the significant value is 0.4579 it is less than 0.05 so H$_1$ is accepted so there is a difference between Gross profit and Net profit.

5.1 Findings

- In the year 2003-2004 the Gross Profit Ratio is 9.09 % and it has been increased to 10.88% in the year 2010-2011. The Researcher came to known that the Gross Profit of the HDFC Life is in increasing trend.
- Net Profit Ratio has been declined in each year by a higher percentage (i.e. from 1.53 % to 17.09%).The slight variation is because of increase in the operating costs of the concern.
- In the year 2003-2004 the Profit Earning Ratio is 3.543 and it has been decreased to0.973 in the year 2010-2011. The Researcher came to known that the Profit Earning Ratio of the HDFC Life is in decreasing trend.
- Current ratios in the first 4 years are more than 9 and it has been declined to 7.1 in the last year. The reason is that the company has utilized the funds in proper way in the year 2010-2011
- Quick ratio of the company in the year 2006-2007, is 15% but it is only 24% and 22% in the years 2009-2010 and 2010-2011. Though the ratio is high in the last two years, it is evident that the company's solvency position is considered to be good, as the ideal ratio is 1:1
- In the year 2003-2004 the Cash to total Ratio is 0.104 and it has been increased to 0.135 in the year 2010-2011. The Researcher came to known that the Cash to total Ratio of the HDFC Life is in increasing trend. The higher the ratio, the higher the liquidity of the asset portfolio; however, this may lead to low profitability.
- In the year 2003-2004 the Cash to total deposits Ratio is 0.093 and it has been increased to 0.124 in the year 2008-2009. It has been slight decreased to 0.092 in the year 2010-2011.The Researcher came to known that the Cash to total deposit Ratio of the HDFC Life is in decreasing trend. Akin to the CRR. A variant to this ratio is including call money to cash in the numerator
- it is inferred that in the year 2003-2004 the Cash to demand deposit Ratio is 0.142 and it has been increased to 0.178 in the year 2010-2011. The Researcher came to known that the Cash to demand deposit Ratio of the HDFC Life is in increasing trend.
- It is inferred that in the year 2003-2004 the Cash Ratio is 0.104 % and it has been increased to 0.135% in the year 2010-2011. The Researcher came to known that the Cash Ratio of the HDFC Life is in increasing trend.
- In the years 2006-2007 to 2009-2010 the total assets turnover ratio has been gradually increased from 0.077 to 0.811. But in the year 2010-2011 it has been slightly reduced to 0.803.In the first 4 years the increase in the ratios indicates the over trading of assets where as the slight decrease reveals the idle capacity.

- Fixed asset turnover ratio is asset turnover ratio is 0.54 in the year 2003-2004, and it is increased to 0.85 in the year 2009-2010, showing that the funds have been efficiently utilized in the assets, but it has been reduced to 1.03 in the last year. The increase in the last year (i.e.) 2010-2011 is due to reduction in employment of fixed assets.
- From the year 2003-2004 to 2010-2011. The Working Capital Turnover Ratio has been decreased from 0.917 to 0.854. This decrease in the ratios confers that the working capital has been turned over efficiently.
- Return on Total Resources are 1.20, 1.29, 1.18, 1.25, 1.19, 1.22, 1.33 gradually increasing in the year 2003-2004, 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, and 2009-2010 respectively and has increased in the year 2010-2011.
- Operational efficiency position of the HDFC Life. In the Year 2008-2009 has the highest operating expenses ratio. The lowest level of ratio has in the year 2007-2008.
- It is inferred that in the year 2003-2004 the Equity multiplier ratio is 107.86 and it has been increased to 485.99 in the year 2010-2011. The Researcher came to known that the Cash Ratio of the HDFC Life is in increasing trend.
- It is inferred that in the year 2003-2004 the Equity ratio is 0.0092 and it has been decreased to 0.002 in the year 2010-2011. The Researcher came to known that the Equity Ratio of the HDFC Life is in decreasing trend.
- It is inferred that in the year 2003-2004 the Provision ratio is 0.115 and it has been decreased to 0.092 in the year 2010-2011. The Researcher came to known that the Provision Ratio of the HDFC Life is in decreasing trend.
- Annual forecasting for the year 2011-2016, for the net profit ratio in the year 2013-2014 is 12.83 crores increased and the year 2012-2013 the Net Profit is 10.03 and Forecast based on moving average method the current ratio from the year 2011-2016 is more than 10 the reason is that the company has utilized the funds in proper way in the year 2012-2013. The researcher came to know that the total deposit for the year 2011-2012 is 0.103 is slightly decrease to 0.096 in the year 2015-2016 A variant to this forecasting is call money to cash in the numerator. Forecast based on moving average method The working capital turnover ratio has been increased from 0.592 to 0.731. An increase in working capital indicates that the business has either increased current assets (that it has increased its receivables or other current assets) or has decreased current liabilities—for example has paid off some short-term creditors. Return on Total Resource Ratio has been increased gradually from 1.323 to 1.357 except in the year 2014-15. It shows that the bank has increased the resources.
- The comparative balance sheet of the company reveals that during 2011there has been an increase in cash & balances with RBI of 9,617.54. Advances have relatively increased by 34,152.08 and balance with bank, money at call has relatively decreased by 9,891.09. Investments have increased by Rs.12, 321.75. The other assets have increased by 8,645.93.

- The comparative balance sheet of the company reveals that during 2011there has been an increase in total share capital with RBI of 7.49. Reserves have relatively increased by 3856.78. Total debt has increased by Rs.42, 660.34. The other liabilities have increased by 8,376.92.
- The comparative balance sheet of the company reveals that during 2010 there has been an increase in cash & balances with RBI of 1,956.07. Advances have relatively increased by 26,947.54 and balance with bank, money at call has relatively increased by 10,479.70. Investments have decreased by 209.93. The other assets have decreased by 398.68
- The comparative balance sheet of the company reveals that during 2011there has been an increase in total share capital with RBI of 32.36. Reserves have relatively increased by 6838.32. Total debt has increased by Rs.34, 822.71. The other liabilities have decreased by 2,104.
- The comparative balance sheet of the company reveals that during 2010 there has been an increase in cash & balances with RBI of 974.03. Advances have relatively increased by 35,456.15and balance with bank, money at call have relatively increased by 1,754.25. Investments has increased by 9,424.01The other assets have increased by 1,951.14
- The comparative balance sheet of the company reveals that during 2011there has been an increase in total share capital with RBI of 70.95. Reserves have relatively increased by 3083.63. Total debt has increased by Rs.40249.96. The other liabilities have decreased by 6288.71.
- Positive correlation between Gross profit ratio and Net profit ratio. Both correlations between -1 to +1
- Positive correlation between Fixed Asset Turnover ratio and working capital turnover ratio. Both correlations between -1 to +1
- The significant value is 0.4579 it is less than 0.05 so H_1 is accepted so there is a difference between Gross profit and Net profit.

5.2 SUGGESTIONS

- The company requires the proper financial planning to develop their short term solvency position.
- The company should maintain the liquid assets properly to face the emergency need to cash.
- To use the available resources in the company for the better future planning.
- Company should maintain the same level of sales to maintain a constant growth.
- Since the company financial condition is very sound.

5.3 CONCLUSION

The liquidity position of the concern is positive. The company has maintained the current assets and current liabilities position effectively which means the current ratio is above the required ratio of 2:1. The liquid ratio and cash ratio of HDFC LIFE insurance are favorable and the

organization can very well meet its current obligation. The profitability of the company is comfortable, which means that the company is making more profit, which are the basic requirements very effectively and properly maintained.   It may be concluded that the organization's overall financial performance is good.

References

Aherensen (2012)' Financial Ratio Analysis using ARMS Data', *Agricultural Finance Review,* vol. 72, no 2, pp. 345-367.

Christine (2010) 'Using MSN Money to Perform Financial Ratio Analysis', "*journal of College Teaching & Learning"*, vol 7, no 9, pp.768-789.

Kirikal L, *etal* (2004)'Estonian Banking Sector Performance Analysis Using Malmquist Indexes And DuPont Financial Ratio Analysis', "*Journal of College Teaching & Learning",*vol 3, no 12 , pp.211-234.

Mirshekary. S, *etal* (2005)' Perceptions and characteristics of financial statement users in developing countries: Evidence from Iran', *Journal of International Accounting, Auditing and Taxation*. vol 14, no 1, pp. 33-54.

Mucue, etal (2009)' A financial ratio analysis of for-profit and non-profit rural referral centers', *the journal of Rural Health,* vol 25, no 3, pp 314–319