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PERFORMANCE APPRAISAL OF INDIAN LIFE INSURANCE COMPANIES THROUGH CARAMEL APPROACH

Dr. S. KAMALESHWAR RAO*
K. HANUMANTHA RAO**

ABSTRACT

Life insurance is man's continuous search for protection and find out the ways and means of restructuring the privation arising out of misfortune. The New Economic Policy 1991 took a departure from the regulated planned economic tradition to that of LPG movement. 23 companies have been established in the private sector and competition arose in the sector. In view of this the performance of the insurance sector should be analysed time to time to find out the drawbacks and make necessary corrections, and also to develop trust among the stakeholders and policy holders that their money is safe. The present study is to assess the financial performance of three Indian life insurance companies namely LIC of India, SBI Life and ICICI Pru Life through CARAMEL approach using ratios and One Way ANOVA. The study is based on secondary data collected from the annual reports of the respective companies for a period of ten years from 2008-09 and 2017-18. There was significant difference for CARAMEL indicators during the period of study at 5% level of significance. The companies have to maintain a reasonable proprietary ratio so that it would not become burden to the share holders. Low ratio of Equity Share Capital to Total Assets indicates low usage of permanent capital for purchase of

* **Professor, Department of Commerce and Business Management, Kakatiya University, Warangal**

** **Research Scholar, Department of Commerce and Business Management, Kakatiya University, Warangal**

fixed assets, investments and working capital. The underwriting risk cannot be avoided by the insurance company but the risk can be minimized by reinsurance, broadening the scope of insurance and stabilizing aspects of large size of business. Increase in expenses with improving business is common but these can be controlled by going for digitization. The growth in the benefits paid was satisfactory in all the three companies and this indicates the companies' promptness in customer services. Earnings of the share holders on their net worth of all the three companies were better. As the insurance business needs more working capital and cash balances for various purposes so having a high current ratio or absolute ratio is better. The companies maintained the required solvency ratio through the study period.

Key Words: Life Insurance, Economic Policy, LPG, Financial Performance, CARAMEL, ANOVA

Introduction: India's insurance market, with significant untapped potential is contributing to economic development, especially to infrastructure development, all this happening with the joint effort of all the stakeholders and increasing multiplying consumer class, rising insurance awareness, increasing domestic savings and investments. The life insurance sector as on 30th June 2018 controls more than Rs. 36,625 crore of deployed capital, over Rs. 34,07,106 crore of managed assets and investments in infrastructure exceeding Rs 3,70,715 crore. Life insurance sector comprises of over 11,148 branches, more than 20.72 lakh agents, 2.67 lakh direct employees and growing significantly, and 32.50 crore In-force policies. Despite raising voices against the unilateral decision to liberalize insurance sector and in response to slower growth rates and penetration levels, the Government announced a second round of reforms in 2015 allowing a composite FDI cap of 49%. Operating Leverage Ratio indicates current as well as potential underwriting capacity through an analysis of a firm's Operating Leverage taking the ratio of deferred insurance liabilities to shareholder equity (number of times the liabilities are to the equity). The proprietary ratio (also known as the equity ratio) is the proportion of shareholders' equity to total assets, and as such provides a rough estimate of the amount of capitalization currently used to support a business. A high proprietary ratio is an indicative of strong financial position of business. The higher the ratio, the better it is. Business net retention represents an insurance company's policy turnover over a specific time period, and is

calculated by dividing net premiums by gross written premiums. Operating expenses include Employees' remuneration & welfare benefits, Travel, conveyance and vehicle running expenses, Training expenses, Rent, rates & taxes, Repairs, Printing & stationery, Communication expenses, Legal & professional charges, Medical fees, Auditors' fees, expenses, etc., Advertisement, Publicity and marketing, Interest & bank charges Recruitment expenses, Information technology expenses, Service tax, Stamp duty on policies, Depreciation, Business promotion expenses. Expense of Management ratio is money used in acquiring, underwriting and servicing an insurance policy. Benefits include survival benefits, surrenders or withdrawals, maturity benefits and death claims. RONW indicates the return which the shareholders are earning on their resources invested in the business. The higher the ratio the better it is for the shareholders. Net working capital is the difference between current assets and current liabilities. Solvency is a regulatory measure of capital adequacy expressed as a ratio of available capital to required capital. As per the IRDA rules the control level of solvency ratio is 150% (1.5).

Objectives: 1. To find the ratios of variables taken for study

2. To analyse the financial performance of the sample units on comparative basis during the period 2008-09 and 2017-18

Methodology: The present study is a descriptive study to assess the financial performance of three Indian life insurance companies namely LIC of India, SBI Life and ICICI Pru Life through CARAMEL approach using ratios and One Way ANOVA. The study is based on secondary data collected from the annual reports of the respective companies for ten years from 2008-09 to 2017-18. Data has also been collected from internet sites and Life Insurance Council website.

Hypotheses (at 5% level of significance):

a) There is no significant difference in the capital adequacy measured by net premium to share holders' funds

b) There is no significant difference in the capital adequacy measured by net worth to total assets

c) There is no significant difference in the risk retention measured net premium income to gross premium income.

d) There is no significant difference in the management efficiency measured operating expenses to gross premium.

e) There is no significant difference in the management efficiency measured by management expenses to gross premium.

f) There is no significant difference in the earnings efficiency measured by net claims to net premium.

g) There is no significant difference in the earnings capacity measured by PAT to net worth

h) There is no significant difference in the liquidity measured by the ratio of current assets to current liabilities.

i) There is no significant difference in the capital adequacy measured by available solvency margin to required solvency margin.

Table 1: Ratios **Source: Calculated**

CARAMEL	Ratio	Year	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Capital Adequacy	Net Premium to Share Holders' Funds	LIC	467.75	508.34	503.69	382.24	404.66	439.66	425.72	456.69	495	488.73
		SBI	7.36	7.97	7.92	6.07	3.83	3.19	3.16	3.31	3.76	3.85
		ICICI	15.25	13	8.55	4.63	3.38	2.8	2.88	3.57	3.46	3.89
	Share Holders' Funds to Total Assets	LIC	0.038	0.032	0.031	0.037	0.033	0.031	0.028	0.026	0.024	0.023
		SBI	6.987	4.496	4.123	4.595	5.18	5.665	5.594	5.863	5.595	5.525
		ICICI	14.564	8.429	7.107	7.087	6.613	6.265	5.318	5.192	5.257	4.975
Assets Quality	ESC to Total Assets	LIC	0.0006	0.0004	0.0004	0.0071	0.0064	0.0057	0.0049	0.0045	0.0039	0.0035
		SBI	7.1413	3.5533	2.53	2.1314	1.9114	1.695	1.3848	1.2388	1.0078	0.8463
		ICICI	4.3476	2.5151	2.117	2.0448	1.9519	1.7973	1.4453	1.3965	1.1774	1.0373
Reinsurance	Net Premium to Gross Premium	LIC	99.94	99.95	99.94	99.96	99.9	99.94	99.92	99.92	99.9	99.88
		SBI	99.87	99.77	99.72	99.6	99.35	99.24	99.32	98.99	99.23	99.23
		ICICI	99.75	99.68	99.64	99.33	99.11	98.83	99.05	99.14	99.11	99.05
Management Soundness	Operating Expenses to Gross Premium	LIC	6.11	6.58	8.35	7.35	8	10.03	9.34	8.52	9.63	9.47
		SBI	8.6	7.45	7.08	7.8	11.01	10.28	9.14	9.21	7.83	6.78
		ICICI	17.85	15.54	12.23	14.29	15.06	13.01	10.79	9.85	10.54	7.5
	Management Expenses to Gross Premium	LIC	12.49	13.09	14.89	14.27	15.07	17.1	15.65	14.33	15.19	15.2
		SBI	15.09	14.05	12.26	11.74	15.91	15.45	13.83	13.73	11.56	11.2
		ICICI	22.41	19.19	15.37	18.61	20.71	18.06	14.41	13.09	13.94	12.68
Earnings	Net Claims to Net Premium	LIC	33.36	42.53	54.67	57.9	64.6	66.69	60.14	53.6	55.47	61.77
		SBI	5.5	8.43	30.33	35.98	74.55	81.76	63.71	50.3	45.33	46.06
		ICICI	14.37	43.62	59.23	60.3	98.15	97.15	80	64.75	66.94	63.64
	PAT to Net Worth	LIC	284.883	289.917	290.236	247.534	278.889	307.596	324.205	431.923	367.999	376.157
		SBI	-2.689	21.851	22.479	25.784	22.958	22.144	20.301	18.192	17.194	17.623

		ICICI	-77.609	20.349	38.737	46.058	37.73	35.662	31.024	30.996	26.252	23.529
Liquidity	Current Assets to Current Liabilities	LIC	2.487	2.259	3.723	3.087	5.858	9.988	6.132	5.568	3.071	2.533
		SBI	0.399	0.448	0.777	2.415	2.399	2.504	2.356	1.855	1.889	1.835
		ICICI	0.574	0.376	0.417	0.535	0.648	0.587	0.691	0.67	1.009	0.787
	Available Capital to Required Capital	LIC	1.54	1.54	1.54	1.54	1.54	1.54	1.55	1.55	1.58	1.58
		SBI	2.92	2.17	2.04	5.34	2.15	2.28	2.16	2.12	2.04	2.06
		ICICI	2.31	2.9	3.27	3.71	3.96	3.72	3.37	3.2	2.81	2.52

Table 2: One way ANOVA **Source: Calculated**

CARAMEL	Ratio	Source of variation	Sum of squares	df	Mean squares	Variance ratio F	Critical value F	Decision on Hypothesis
Capital Adequacy	Net Premium to Share Holders' Funds	Between companies	1359963	2	679981.7	1132.198	3.35	REJECTED
		Within companies	16215.8	27	600.586			
		1376179	29					
	Share Holders' Funds to Total Assets	Between companies	270.291	2	135.146	48.842	3.35	REJECTED
		Within companies	74.709	27	2.767			
			345	29				
Assets Quality	ESC to Total Assets	Between companies	31.749	2	15.875			REJECTED
		Within companies	39.442	27	1.461			

			71.191	29	17.335	10.867	3.35	
Reinsurance	Net Premium to Gross Premium	Between companies	2.342	2	1.171	18.887	3.35	REJECTED
		Within companies	1.661	27	0.062			
			4.003	29				
Management Soundness	Operating Expenses to Gross Premium	Between companies	119.895	2	59.948	18.21	3.35	REJECTED
		Within companies	88.879	27	3.292			
			208.774	29				
	Management Expenses to Gross Premium	Between companies	57.823	2	28.912	172.095	3.35	REJECTED
		Within companies	4.541	27	0.168			
			62.364	29				
Earnings	Net Claims to Net Premium	Between companies	2128.07	2	1064.037	2.36	3.35	REJECTED
		Within companies	12165.9	27	450.587			
			14293.9	29				
	PAT to Net Worth	Between companies	60.006	2	30.003	219	3.35	REJECTED

		Within companies	3.691	27	0.137			
			63.697	29				
Liquidity	Current Assets to Current Liabilities	Between companies	78.731	2	39.366	17.74	3.35	REJECTED
		Within companies	59.906	27	2.219			
			138.637	29				
	Available Capital to Required Capital	Between companies	13.416	2	6.708	1.34	3.35	REJECTED
		Within companies	135.007	27	5			
			148.423	29				

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Analysis and Interpretation: The deferred insurance liabilities are too high for LIC; the main reason is low net worth balance of the company. SBI and ICICI have greater reserve balances and also share capital so their liabilities appear low. Low proprietary ratio indicates high dependency on debts but none of the three companies under study have external borrowings. LIC was able to maintain the ratio at less than 0.30 percent but still is financial strong enough as it has no share holders except the Government of India and well established. In case of SBI and ICICI, the ratio decreased which shows that the shareholder's contribution in the total assets was declining. The companies might be depending on the premium income directly. The ratio of ESC to Total Assets declined in all the three companies. Compared to LIC and SBI, ICICI had highest ratio during all the years of the study. The risk retention ratio indicates the level of risks retained by the insurer. Reinsurance plays an essential role in the risk spreading process. All the three companies during all the years of study maintained the net retention ratio at above 99 percent which mirrors the high turnover and high risk retention of the companies. LIC had shown a mixed trend in the operating expenses. SBI, with slight fluctuations it had a mix of increasing and decreasing trends. ICICI's ratio declined from 2008-09 to 2010-11 and from 2013-14 to 2015-16. Initially the expenses of management ICICI and SBI were more but later on declined. LIC had a shown mixed trend. On aggregate there is no significant growth in the expense ratio of any company. LIC is spending around 15 percent of its premium income on acquiring, underwriting and serving a policy. SBI is spending around 11 percent and ICICI is spending around 13 percent. The ratio of benefits paid in LIC and SBI increased up to 2013-14 and there on declined. During the five years period from 2009-10 to 2011-12 in ICICI, there was a massive hike in the amounts of benefits. During 2009-10 to 2011-12 the percentage was more than 40 percent. From 2010-11 to 2014-15 the percentage was above 80 percent and even 94.77 percent in 2012-13 and 98.53 percent in 2014-15; major claims were surrenders and death claims. The benefits paid during 2017-18 were Rs.17225.86 crores. During 2015-16 and 2017-18 the share of benefits in premiums was above 60 percent. As the net worth of LIC contains only Rs. 100 crores paid up capital and remaining amounts as reserves, the RONW appears bigger. RONW of SBI and ICICI though declined, it was better during the study, and the reason for declining ratio was increasing reserves in the net worth; the rate of growth of profits was less than the growth rate of net worth. LIC has maintained greater than the ideal current ratio during all the years

of the study. Current ratio of SBI wavered. ICICI was unable to maintain the current ratio even nearer to the ideal ratio; it was even less than one in all the years except during 2016-17. This is also reflected in net working capital which was negative during all the years of the study except 2016-17 as the current liabilities were more than current assets. LIC maintained almost equal to the required ratio. SBI and ICICI have maintained more margin but ICICI was better compared to SBI.

Conclusion: The hypotheses taken have been rejected and concluded that there was significant difference for all the CARAMEL indicators among the sample units at 5% level of significance. The major source for all three companies during study period was premium income. SBI and ICICI also have good underwriting capacity. The ratio around 3 (three) is nominal. If the company is having sufficient amounts of total assets, earning capacity is good and claims are paid in time, then it is not a situation of worry. Growth rate in total assets of all the three companies is more than growth rate in net worth and this could be the reason for low proprietary ratio. The low ratio indicates the total assets are more than sufficient to pay off the liabilities of share holders in case of liquidation. The companies have to maintain a reasonable proprietary ratio so that it would not become burden to the share holders. Financing fixed assets out of short term funds or utilizing long term funds for repaying short term liabilities or for meeting day-to-day transactions leads to financial imbalance. The Company has to maintain an ideal capital structure and provide security to the creditors. The companies would need to maintain sufficient cash and bank balances required at least for three months. Even this would enhance the solvency ratio of the company. Low ratio of Equity Share Capital to Total Assets indicates low usage of permanent capital for purchase of fixed assets, investments and working capital. The net retention ratio of all the three companies was above 99 percent that replicates the high risk bearing capability of the companies. The underwriting risk cannot be avoided by the insurance company but the risk can be minimized by reinsurance, broadening the scope of insurance and stabilizing aspects of large size of business; and the investment risk could be minimized by evaluating them on market value. Increase in expenses with improving business is common but having control on operating expenses and expenses of management are necessary. These can be controlled by going for digitization. Comparatively, expenses of management in ICICI declined hugely, and SBI to some extent. This a positive sign in controlling the expenses which increases the total income and profits of the company. Initially the expenses of management ICICI and SBI were more but later on declined. LIC had a shown mixed trend. On aggregate there is no

significant growth in the expense ratio of any company. The expenses in LIC are greater than ICICI and SBI. The growth in the benefits paid was satisfactory in all the three companies and this indicates the companies' promptness in customer services. SBI ranks high among the three companies in the growth of payments of benefits. ICICI was displaying a significant relation between the benefits to the gross premium as the percentages of benefits to the gross premium were high (nearer) in ICICI. Payments of benefits involve cash outflows. High outflow in LIC was because of more number of policies and survival benefits, maturity benefits and death claims. High ratios of payments indicate high ability of repayment of benefits. The usage of total assets was very low, which means that total assets were not utilized to their fuller extent and the returns on total assets were low. Earnings of the share holders on their net worth of all the three companies were better. The year wise declining ratio of SBI and ICICI might be due to uneven growth of PAT and Net worth. The uneven growth ratio of PAT to Net worth can be trounced if the investments of funds are systematic. Fixed assets are to be utilized to their full capacity. If the surplus ratio to the policy holders' liabilities can be amplified it would enhance the security to their monies. As the insurance business needs more working capital and cash balances for various purposes like payment of claims and allowing loans so having a high current ratio or absolute ratio is better. Companies should be prompt in repaying short term debts and advances and maintain sufficient cash balances to meet the obligations immediately when they arise. The companies maintained the required solvency ratio through the study period. This instills confidence in policy holders and share holders that the company can repay the claims in time. ICICI maintained high solvency ratio among the three. None of the three companies have borrowings because the premium income is the main source of income and the premiums are returned to the policy holders either only on maturity, or death or surrender. As the mortality rate is low (not even one percent) the premature return of premium as a claim will be low; so to run the business generally no insurance company need to go for borrowings.

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