Earnings and Profitability Analysis of Life Insurance Companies-Comparative Study of ICICI Prudential and SBI Life Insurance companies

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[Abstract] Insurance has been playing a vital role in advanced and emerging nations and has been recognized as a reliable tool for the mobilization of public savings. In India, the insurance sector has gone through various phases, such as deregulation, regulation, nationalization, privatization and globalization. Liberalization has paved the way for the entry of many private players that have the support of foreign partners. Since 2000, the Indian life insurance sector has been characterized by intense competition between the private and public sector players and within the private sector players. Against this backdrop, this study aims to examine the earnings and profitability performance of ICICI Life and SBI Life during the period 2010-11 to 2017-18 by employing indicators from the CARAMEL framework. For further analysis of the data, a t-test is applied, and the results of the t-test reveal that there is a significant difference in the performance of selected insurers.

[Keywords] ICICI Life, SBI Life, CARAMEL framework, t-test

Life Insurance is a contract under which, in consideration of sums of money (called premiums), the insurer agrees to pay a certain amount of money on the death of the insured or upon the expiration of a certain fixed period, whichever is earlier. Here, an insurer is the one who indemnifies the loss suffered by the insured and the insured/assured is the one who gets protection against the loss by paying the premium.

Brief History and Present Condition of Life Insurance in India

Life insurance in its modern form came to India from England in the year 1818. The first life insurance company on Indian soil was the Oriental Life Insurance Company started by Europeans in Calcutta. Later, in 1870, the Bombay Mutual Life Assurance Society, the first Indian life insurance company, was started. Subsequently, a number of insurance companies came into existence. Prior to 1912, there was no legislation in India to regulate the insurance business and in 1912 the first Insurance Companies Act was passed with a view to regulating the insurance business. In 1938, the Insurance Act was passed to govern the life insurance and the non-life insurance business. The life insurance business in India was nationalized in 1956, and by the act of parliament, the Life Insurance Corporation of India (LIC) came into existence on September 1, 1956. From 1956 to 1999, the Life Insurance Corporation of India reigned over the Indian life insurance industry. The monopoly of LIC in the Indian life insurance sector came to an end with the opening up of doors to private participation. As a result, many private insurance companies jumped into the fray in the form of joint ventures with globally recognized foreign players as their partners.

The Indian life insurance industry expanded tremendously from the year 2000 onwards in terms of premium income, number of offices, number of agents, new business products, and so on; as of now, the Indian life insurance business is shared by twenty-three private life insurers besides the sole public insurer, LIC of India. For the purpose of the present study, two private life insurance companies, which are largest gross premium earners as on March 3,2018, were selected. ICICI Prudential Life with Rs.27068.77 crore and SBI life with Rs.25354.19 crore of gross premiums stood in first and second places, respectively;

therefore, these two companies have become the crux of the present study. Brief profiles of the selected insurers are as follows:

ICICI Prudential Life Insurance Company has been promoted jointly by ICICI Bank limited, a leading private sector Indian bank, and Prudential Corporation Holdings Limited by contributing 74 per cent and 23 percent capital, respectively. It came into existence on July 20, 2000, and received a certificate of registration from IRDAI to carry out the life insurance business on November 20, 2000. ICICI Life began its operations in fiscal year 2001 with the vision to build an enduring institution that serves with sensitivity the protection and long-term saving needs of customers. ICICI Prudential Life, known as ICICI Life, has become the first insurance company in India to be listed on the NSE and the BSE in 2017. It offers term insurance, health insurance, and unit-linked, savings, and retirement plans for individuals and groups to meet varied needs of the customers.

SBI Life insurance company has been established as a joint venture between India's largest bank, State Bank of India (SBI) and the leading global insurer BNP Paribas Cardif. It incorporated October 11, 2000, and received permission from IRDA on March 29, 2001, to carry on the life insurance business. SBI and BNP Paribas contributed 62.1 percent and 22 percent, respectively, of capital in SBI Life and the rest of the capital by Value Line Pte. Ltd., Macritchie Investments Pte. Ltd., and the general public. SBI Life incorporated with an authorized capital of Rs. 2000 crore, while it is paid up capital is Rs.1000 crore. SBI Life, which started its operations with the vision "To be the most trusted and preferred life insurance provider," initially depended upon the Bancassurance and now is developing its own agency team for selling insurance products. SBI Life's insurance products include various policies meant to address different needs of different sections of the society. It offers unit-linked, child plans, protection plans, saving plans, retirement, group plans, and the like.

Review Of Literature

Existing literature on the financial performance analysis of the life insurance industry has been reviewed, and excerpts of the literature review are as follows: Charumathi (2012), in her empirical study entitled" On the Determinants of Profitability of Indian life Insurers: An Empirical Study," tried to observe the influence of various factors on the profitability of Indian life insurers by assuming the return on assets was a dependent variable. The researcher carried out the research work by using the secondary data pertaining to the twenty-two private life insurers and one public insurer. The results concluded that the profitability of life insurers was positively affected by the size of net premium and liquidity.

Nikolina Smazla (n.d.), carried on his study to understand the level of financial soundness of Croatian insurance companies by using the CARAMEL model. This study is carried out on twenty-four insurance companies being operated in Croatia. It was discovered through the study that the liquidity indicators of the companies were not favorable and suggested the Croatian insurance regulatory authorities pay attention to the health of the capital adequacy and liquidity indicators of the insurers.

Kumari (2013), made a study of the financial performance of the Indian life insurance industry in the post liberalization era. For this purpose, various parameters, such as the number of life insurance companies, number of offices, growth in premium income, number of new policies issued, and market share, were considered. The study revealed that there had been a significant increase in the overall business performance of the Indian life insurance industry after privatization and suggested life insurers render an efficient and effective service to the policy holders for the sustained growth of the business.

Valeed A. Ansari and W. Fola (2014) conducted a quantitative research to examine the financial soundness and performance of life insurance companies in India by employing the CARAMEL model. The study was carried out on the performance of seven registered life insurers during the period 2008-2012. The results of the study reveal that there was a significant difference between the capital adequacy, asset quality, management efficiency, earnings, profitability, and liquidity position of private and public life insurance companies.

C. Kalpana Naidu and C. Paramasivan (2015), attempted to compare the financial performance of LIC and private insurance companies by taking a sample consisting of five life insurance companies. The authors are of the view that sale of more unit-linked plans helped the private players in grabbing a considerable market share from LIC. Findings show that the capital adequacy ratio of private insurers was more impressive than that of LIC, and LIC had a better record of servicing death claims. The study concluded that security is the prime factor, which influences the selection of an insurance policy.

Anoop Kumar Singh and Sumbul Fatima (2017), attempted to evaluate the growth and performance of ICICI Prudential Life Insurance, one of the major private sector life insurance companies in India. In this study, growth was assessed on the basis of parameters, such as net profit, net premium, number of branches, and so on; for the over-all evaluation, the CARAMEL model was applied. Findings of the study were statistically tested with the help of the one sample t-test. The study revealed that though the company has not maintained the capital base in proportion to the total assets, its overall performance remained satisfactory.

All the above studies are mainly focused to assess the financial performance/ soundness of public and private sector life insurance companies with a comparative outlook. However, this study was planned so as to make the comparative analysis of the profitability performance of ICICI Prudential Life insurance company and SBI Life insurance company.

Objective of the Study

The main objective of the present study is to make the comparative profitability performance analysis of ICICI Life and SBI Life during the period 2010-11 to 2017-18.

Statement of Hypotheses

H_0-1: There is no significant difference between the performance of ICICI Life and SBI Life with regard to expenses to net premium ratio.

H_0-2: There is significant difference between the performance of ICICI Life and SBI Life with regard to investment income to investment assets ratio.

H_0-3: There is significant difference between the performance of ICICI Life and SBI Life with regard to return on equity ratio.

Research Methodology

The present study is based on secondary data, which has been extracted from different websites and from the handbook on Indian insurance statistics released by IRDAI. To analyze the quantitative data, apart from the ratio analysis, statistical tools, such as mean, standard deviation, and t-test, have been used. The overall financial position of an insurance company depends on many factors, and some of them are non-quantifiable, such as quality of its management, organizational setup, and systems and controls that are in vogue. The International Monetary Fund (IMF) working paper on insurance and issues in financial soundness (WP/03/138), proposed by Das, Devis, and Pod Piera, who have suggested some indicators to diagnose the soundness of the life insurance sector. As per this paper, financial soundness indicators (quantitative) for the life insurance sector can be presented within the CARAMELS(capital adequacy, asset quality, reinsurance and actuarial issues, management soundness, earnings, and profitability, liquidity, and sensitivity to market risk) framework. This study mainly focuses on the earnings and profitability category of the CARAMEL framework; from this category, a few indicators/ ratios are selected to carry out the present study.

Earnings and Profitability Category

Profits are necessary for any business to operate as a going concern, and, therefore, every business aims at making profit**.** Low profitability signals operational and other problems that must be faced by the insurer. The efficiency and the ability of the insurer to generate profits can be measured with the help of profitability ratios. These ratios give a picture of the management efficiency in earning profits out of the money invested and assets used in the business. For the purpose of the current study, three ratios have been employed for evaluating the earning and profitability performance of the insurers: expenses to net premium ratio, investment income to investment assets ratio, and return on equity ratio.

Expenses to Net premium Ratio

Expenses to net premium ratio reveals the relation between the amount of expenses incurred for earning the net premium and the amount of net premium earned. It indicates how well the company is performing in terms of efficiency in controlling expenses while earning the net premium. A lower ratio, which implies a low percentage of expenses to premium, is preferable. To calculate this ratio, operating expenses related to insurance business and commissions paid are taken as expenses, and the net premium is the amount of the gross premium adjusted for premium on reinsurance. Expense to net premium ratio is calculated by employing the following formula:

$$\text{Expenses to Net Premium Ratio} = \frac{\text{Expenses}}{\text{Net Premium}} \times 100$$

Table 1

Expenses to Net Premium Ratio *(in percentage)*

Insurer/ Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Mean	Standard Deviation
ICICI Life	15.42	18.73	20.84	18.27	14.55	13.20	14.06	12.18	15.99	2.94
SBI Life	12.07	11.79	16.01	15.57	13.92	13.87	11.65	11.29	13.27	1.84

Source: calculated from the Appendix- 1

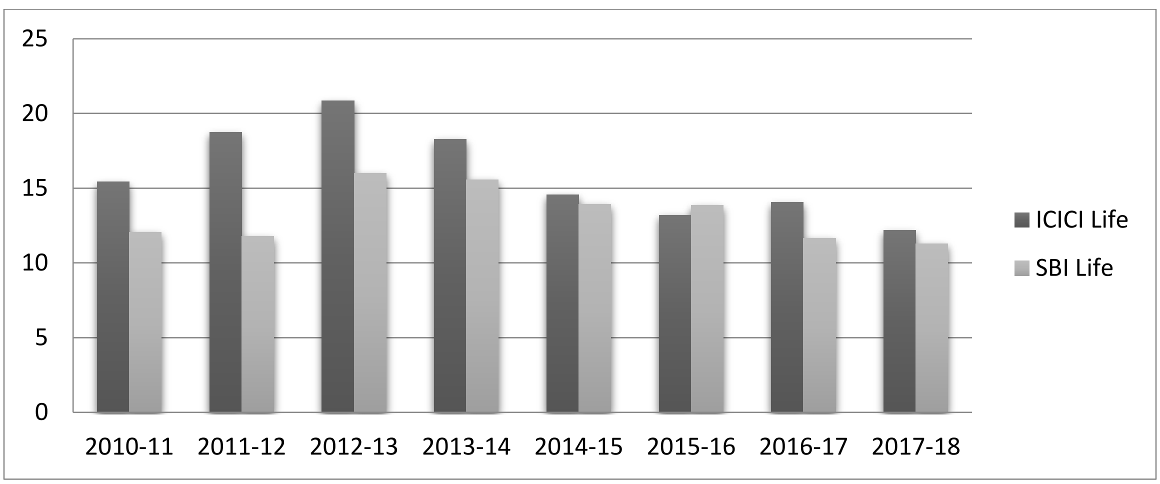

Figure 1. Expenses to Net premium Ratio

The expense to net premium ratios of ICICI Life and SBI Life are shown in Table 1. During the study period, 2010-11 to 2017-18, the ratio of ICICI Life has varied in between the lowest range of 12.18 and highest range of 20.84. A considerable decline in the ICICI Life's expense ratio from 20.84 in the 2012-13 period to 12.81 per cent in the 2017-18 period can be observed from the table; it indicates the insurer's efficiency in controlling the operating expenses. SBI Life's mean value of 13.27 indicates it has the ability to control and minimize the expenses to the least percentage of the net premium, i.e.13.27 %. SBI Life's ratio moved in between the range of 11.29 and 16.01, and from 2012-13 onwards, it has been trying to minimize its expense ratio. Figure-1 shows that during the eight-year study period, only in 2015-16 did SBI Life's expense ratio exceed its counterpart's ratio. SBI Life's mean value of 13.27 is lower that of the ICICI Life (15.99), which indicates it has performed better than ICICI Life during the study period.

Investment Income to Investment Assets Ratio

Income from investments is the second main source of income for insurers. The investment income to investment assets ratio serves as an indicator that can show the effectiveness of the insurer's investment policy. This ratio reflects the rate of return being generated from investments. The investment assets here, refers to all investments made out of shareholder's funds, policyholder's funds, and policyholder's reserves. Therefore, investment income consists of the income earned both from policy holders' and shareholders' investments. Interest income on policyholders' investments is the amount that has been shown under the heading Interest, Dividends & Rent (Gross) in policy holders' accounts, and interest income on shareholders' investments is the amount shown under the heading Interest, Dividends & Rent (Gross) of shareholders' accounts. A higher ratio is preferred, as it indicates higher returns on investments. This ratio is calculated by applying the following formula:

$$\text{Investment Income to Investment Assets Ratio} = \frac{\text{Investment Income}}{\text{Investment Assets}} \times 100$$

Table 2

Investment Income to Investment Assets Ratio *(in percentage)*

Insurer/ Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Mean	Std. Deviation
ICICI Life	21.70	19.06	19.13	17.81	15.85	15.16	13.55	12.75	16.88	3.07
SBI Life	8.85	12.07	11.84	11.62	10.29	10.61	10.59	10.86	10.84	1.04

Source: Computed from Appendix- 1

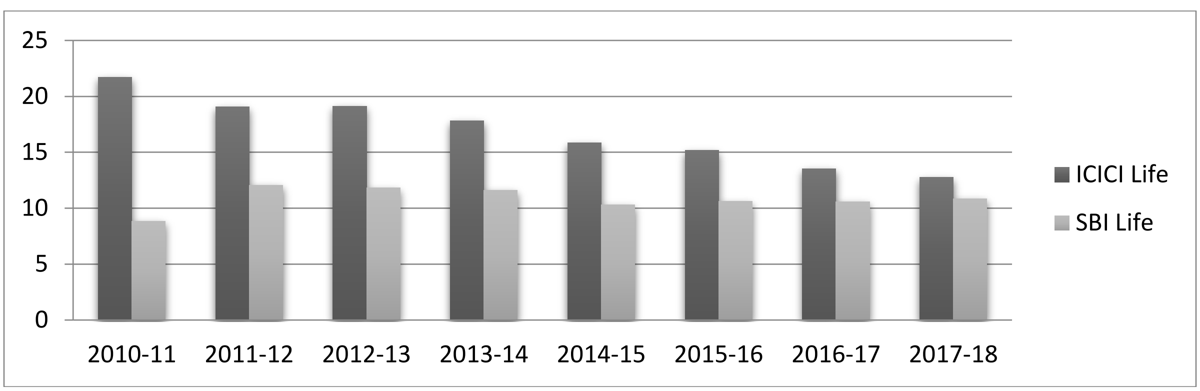

Figure 2. Investment Income to Investment Assets Ratio

ICICI Life's investment income to investment assets ratio moved in between the range of 12.75 and 21.70, and its mean value is recorded at 16.88, which is higher than that of SBI Life. Though its mean value is higher than the SBI Life's, it failed to check and control the decline in the ratio from 21.70 percent to 12.75 percent, which may cause erosion of profits. SBI Life's ratio varied between 8.85 and 12.07, and Table-2 illustrates that in the period 2011-12, its ratio crawled up to 12.07 from 8.85 percent. Then, immediately from the next succeeding year, the ratio started to slope down, and that trend continued until 2014-15. Figure-2 clearly portrays the better performance of ICICI Life over the SBI Life. The mean value of ICICI Life (16.88), which is higher than that of the SBI Life (10.84), indicates ICICI's ability to earn higher returns on investments.

Return on Equity Ratio

Return on equity of a company indicates the ability of the management of a business to generate adequate returns on the capital invested by the owners of the business. In other words, it indicates how best the equity share capital is used to generate the profits. A higher ratio is the index of high profitability of the business and more dividends for the shareholders. It is calculated by dividing the net profit with equity share capital. Here, profit after tax is considered as net profit, and share capital is assumed as the equity. By assuming return on equity as the reward on the original investment of the investor, reserves and surplus are not considered for calculation of this ratio. The return on equity ratio is calculated by employing the following formula:

$$\text{Return on Equity ratio} = \frac{\text{Profit after Tax}}{\text{Equity}} \times 100$$

Table 3
Return on Equity Ratio *(in percentage)*

Insurer/ Year	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	Mean	Std. Deviation
ICICI Life	56.54	96.87	104.69	109.61	114.15	115.23	117.20	112.84	103.39	20.05
SBI Life	36.63	55.58	62.22	74.01	82.00	86.10	95.47	115.04	75.88	24.50

Source: Computed from Appendix-1

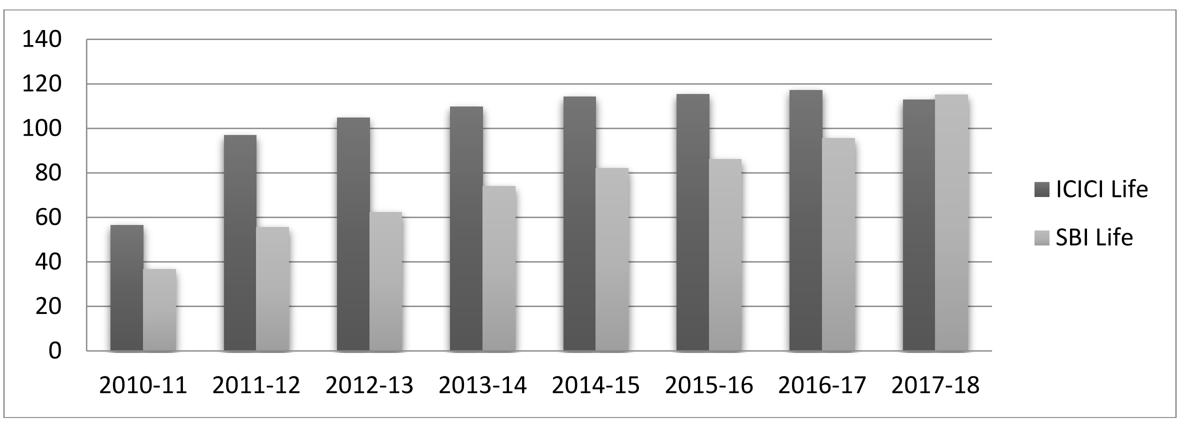

Figure 3. Return on Equity Ratio

ICICI Life's ROE ratio witnessed an increasing trend from the period 2010-11 to 2016-17, but in 2017-18, that trend got reversed, and, on the whole, it secured a mean value of 103.39. The ROE ratio of ICICI Life has swung in between 56.54 and 117.20, while that of SBI Life has swung between 36.63 and 115.04.There is an upward trend in the ratio of SBI Life year by year, while ICICI Life experienced a decline in 2017-18. The positive feature of the SBI Life's performance is that it continuously upgraded its ratio, thereby sending a signal of its improving profitability year by year. However, as per the mean values of the insurers, ICICI Life is exhibiting more profitable position than the SBI Life.

Testing of Hypothesis

In order to statistically test the significance of difference between the performance of ICICI Life and SBI Life Insurance companies, an independent t-test has been employed.

Table 4
Test Statistics

Indicator	Group	N	Mean	Standard Deviation	t-value	p value
Expenses to Net premium Ratio	ICICI Life	8	15.99	3.04	2.0978	0.05455
	SBI Life	8	13.27	1.84		
Investment income to Investment Assets Ratio	ICICI Life	8	16.88	3.07	5.265	0.00012
	SBI Life	8	10.85	1.04		
Return on Equity Ratio	ICICI Life	8	103.39	20.05	2.4578	0.02763
	SBI Life	8	75.88	24.50		

H_0-1: There is no significant difference between the performance of ICICI Life and SBI life with regard to expenses to net premium ratio.
From the Table-4, it is clear that the p-value of the test for the indicator expenses to net premium ratio is 0.05455. As the p-value is greater than the significance level alpha of 0.05 and as it indicates the non-significant difference between the groups, the null hypothesis accepted.

H_0-2: There is no significant difference between the performance of ICICI Life and SBI Life with regard to Investment income to Investment assets ratio.
The P value of the t-test for investment income to investment assets is found to be at 0.000. As the lower p-value than the significance level alpha of 0.05 indicates significant difference between the groups, the null hypothesis is rejected.

H_0-3: There is no significant difference between the performance of ICICI Life and SBI Life with regard to the return on equity ratio.
Table-4 reveals that p-value of the t-test for return on equity ratio is 0.02763, and as it is less than the significance level alpha of 0.05, there exists significant difference between the groups. Hence, the null hypothesis is rejected.

Summary and Conclusions

From the analysis of the test results, it is clear that there is a significant difference in the earnings and profitability performance of ICICI Life and SBI Life. Out of the three indicators selected for study, ICICI Life has outperformed SBI Life in the case of two indicators. By having higher mean values in the case of the income on investments ratio and the return on equity ratio, ICICI has manifested itself as a more profitable insurer. Though ICICI Life stood ahead of SBI Life in maintaining the higher investment income ratio throughout the study period, an obvious fact that its performance is includes a continuous fall in its investment income ratio. Hence, ICICI Life needs to adopt immediate corrective measures to arrest the downfall in the ratio. In the case of the return on equity ratio, SBI Life, which underperforms ICICI Life up to 2016-17, as illustrated by an exemplary performance in the year 2017-18. SBI Life, which has the advantage of maintaining a low expense ratio, has to review its investment policy and portfolio to earn substantial returns and to be a tough competitor for ICICI Life.

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Appendix 1

(Rs In crores)

Year	Expenses		Net premium	
	ICICI Life	SBI Life	ICICI Life	SBI Life
2010-11	2748.07	1554.04	17816.98	12875.52
2011-12	2608.94	1542.29	13927.88	13080.84
2012-13	2796.64	1662.46	13417.24	10382.11
2013-14	2244.35	1659.61	12282.65	10657.10
2014-15	2205.19	1779.30	15160.45	12780.00
2015-16	2508.33	2172.39	18998.70	15665.45
2016-17	3116.12	2429.83	22155.25	20852.45
2017-18	3433.20	2839.71	26810.68	25160.07

(Rs In crores)

Year	Investment income		Investment assets	
	ICICI Life	SBI Life	ICICI Life	SBI Life
2010-11	1995.02	1383.14	9193.66	15633.78
2011-12	2399.22	2210.57	12587.77	18309.47
2012-13	3099.63	2783.22	16206.95	23499.45
2013-14	3528.54	3216.00	19809.48	27677.34
2014-15	3917.18	3557.82	24714.72	34574.71
2015-16	4204.67	4436.79	27731.29	41820.80
2016-17	4566.99	5425.83	33707.63	51257.25
2017-18	5232.51	6464.11	41038.14	59500.02

(Rs In crores)

Year	Profit after tax		Equity	
	ICICI Life	SBI Life	ICICI Life	SBI Life
2010-11	807.62	366.34	1428.46	1000.00
2011-12	1384.17	555.82	1428.85	1000.00
2012-13	1495.94	622.17	1428.94	1000.00
2013-14	1566.66	740.13	1429.26	1000.00
2014-15	1634.29	820.04	1431.72	1000.00
2015-16	1650.46	861.03	1432.32	1000.00
2016-17	1682.23	954.65	1435.35	1000.00
2017-18	1619.83	1150.39	1435.50	1000.00

Source: Handbook on Indian insurance statistics, IRDAI.