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Financial Performance of Indian Private Life Insurance Companies in the Post Liberalisation Period: A Comparative Study between the First Two Decades of 21st Century

Debashis Das Sharma[1] and Dr. Subhas Chandra Sarkar[2]
[1]*Associate Professor of Commerce, Khalisani Mahavidyalaya Chandernagore, Hooghly and Research Scholar (Ph.D), Department of Commerce, University of Kalyani, Nadia, West Bengal, India*
[2]*Professor, Department of Commerce, University of Kalyani, Nadia, West Bengal, India*

[1]*Corresponding Author: debashis.dassharma@gmail.com*

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ABSTRACT
Insurance sector in India played a vibrant role in the development of economy. At the advent of new economic policy in 1991, insurance sector has started dynamic changes following the slogan of LPG. IRDA was formed as regulatory authority in 1993, to monitor and control over the insurance market. There was only public sector insurance company in the Indian life insurance business popularly known as LIC who have enjoyed monopoly from 1956 to 1999 over the life insurance sector. This scenario has dramatically changed after the entry of 23 private life insurance players with joint venture of Indian companies in 1st decade of 21st century. These companies have introduced several dynamic business strategies to capture the market within a very short period of time. Innovative products, smart marketing and aggressive distribution have enabled fledgling private insurance companies to get Indian customers to sign up faster than anyone expected. A healthy competitive environment has been observed during this period. Private insurers snatched a significant portion of the market share within couple of years. Life insurance industry observed remarkable growth and development in the post liberalisation period. An attempt has been made to evaluate the financial performance of the selected private life insurers between the first and 2nd decade of 21st Century. The objective of the study is to examine whether financial performance of the private life insurance companies have been improved from 1st decade to 2nd decade. With a view to attaining the objectives financial performance have been measured by using selected ratios of CARAMEL framework. Six indicators have been used to assess the Capital adequacy, Asset quality, Reinsurance & actuarial issues, management soundness, Earnings and profitability and Liquidity position of the companies. With a view to comparative analysis Mean and CV of the selected ratios of each companies have been tabulated during the two decades. The results obtained are statistically tested with the help of paired sample t-test in order to draw the logical inferences. It has been observed that financial performance of most of the private life insurance companies have been improved from 1st decade to 2nd decade.

Keywords: *lpg, irda lic, caramel liberalisation, capital adequacy, actuarial issues*

I. INTRODUCTION

The Insurance industry is one of the fastest growing industries over the country like India. It is one of the booming sectors of the economy and presently growing @ 35-40% annually with a total insurable population of less than 40%. Huge untapped population provides unlimited scope to life insurance companies for market expansion and penetration in India. After nationalisation of the insurance industry in 1956, state run Life Insurance Corporation (LIC) held monopoly over the life insurance market up to 1999. Economic reforms have been started in the year 1991 to liberalize the economy. In 1993, a committee was formed under the chairmanship of R.N. Malhotra, Governor of R.B.I to regulate & develop the insurance sector. Insurance Regulatory and Development authority (IRDA) was incorporated as an autonomous body in the year 1999. IRDA opened the market for private participation in August 2000. The wave of liberalisation has changed the whole scenario of the insurance sector. The monopoly of LIC broke with the entry of private players. They come up with innovative & flexible policies, aggressive marketing, well distribution channel, good customer's services, after sale services, advertisement, good communication etc. A bunch of new companies have entered into the market by 2011. At present 23 private life insurance companies are operating in India. Within a couple of years they grabbed a significant portion of the market share within first ten years of journey from 0.54% in 2001-02 to 30.23% in 2010-11 and reaches to 35.86% in the year 2020-21. In the post liberalisation period life insurance sector in India was grown tremendously. As well as Private life insurance companies have shown remarkable performances in the last two decades of the 21st century. Profitability of those life insurance companies have also remarkably improved during this period. In this scenario we have interested to study a comparative evaluation of financial performance of the private life insurance companies between the first and the second decades of the 21st Century.

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II. LITERATURE REVIEW

An attempt has been made to review some relevant literatures which are related to the area of the present study. In order to identify the 'research gap' a comprehensive literature review is required to be done so that objectives of the study can be set accordingly.

Literature Published in the 1st Decade of the 21st Century

(1) Dalal & Gupta (2004) conducted a comparative study on the profitability of LIC and Tata AIG. They concluded that the profitability of the comparable schemes of LIC and Tata AIG varied form case to case.

(2) Ahmad (2008) studied on the Indian insurance industry. The main objectives of his study were to highlight the challenges and prospects of the Indian insurance industry. The study concluded that insurance plays a very important role in the financial sector of the country and that the insurance industry could go ahead with full of opportunities. He also stated that the key challenges which all insurers would face in the years to come were product innovation, customer service, distribution network, managing investments and effective cost control.

(3) Hussain (2010) made an attempt to examine the growth of LIC during the period 2004-05 to 2008-09 after the entry of private insurance players in the Indian life insurance industry. The researcher have used certain parameters like premium, commission, operating expenses, etc. and the analysis reveals that the increase in commission expenses being lower than the increase in gross premium and other operating expenses is higher compared to premium underwritten.

(4) Gulati and Jain (2011) examined the business performance of all life insurers in industry on the basis of various indicators. The study reveals that even after the entry of private sector, the growth of public sector undertaking had not resulted in downfall even after facing various opportunities and challenges.

(5) Chaudhary and Kiran (2011) observed current scenario of life insurance industry in light of some changes and regulation of IRDA. By studying different variables the result showed that life insurance industry expanded tremendously from 2000 onwards in terms of number of offices, number of agents, new business policies, products, premium income etc.

Literature Published in the 2nd Decade of the 21st Century

(6) Charumathi (2012) studied the factors that determine the profitability of life insurers operating in India. The sample for the study included one public and twenty two private players and period of the study covers three years from 2008-09 to 2010-11. For achieving the purpose, regression analysis was performed which resulted that profitability of life insurers was positively affected by size and liquidity but negatively influenced by leverage, premium growth and equity capital.

(7) Kumari (2013) analysed the financial performance of both public and private life insurance industry. For this purpose, various parameters such as number of life insurance companies, private sector offices, insurance penetration and density, growth in premium income, size of insurance market were discussed. Financial performance was observed by calculating various financial ratios. The study resulted that there had been a significant increase in the overall business performance of Indian life insurance industry after privatisation.

(8) Dar and Bhat (2015) made an attempt to measure the financial performance and soundness of the selected public and private life insurance companies in Indian. In this paper, the authors have applied a set of ratios in the analysis to examine the life insurer's financial and statistical returns. Three parameters have been used from CARAMEL framework indicators to analyse and evaluate the financial performance and soundness of the life insurance companies under the study.

(9) Solanki (2016) has evaluated the profitability of life insurance companies in India. To assess the profitability of the companies various ratios have been calculated. The study reveals that the private sector life insurances companies should strive to increase its volume of business by issuing more and more policies in order to retain its market share in the highly competitive scenario of the life insurance industry.

(10) Rathnavathi and Udayachandra (2019) reported that private insurance companies created stiff competition to LIC by launching many innovations in terms of products, market channels and advertisement of products and through agent training and customer services. In this background, the authors intended to analyse the financial soundness and performance of private life insurance companies in the light of CARAMEL parameters. They selected five private life insurance companies which covered the study period 2007-08 to 2016-17. From the study it is clear that Indian private life insurance companies are satisfactorily financially sound on the whole. However, the researchers observed strange weaknesses and believe that it is because the companies have given excessive attention on innovations in products and marketing to increase the premium without a proportionate designating of the funds towards risk management. Most of the private life insurance companies are incurring high rising costs due to huge commission expenses, have relatively inadequate capital position and no consistency in liquidity position. Therefore, it is necessary for them to cut their operating costs, improve their actuarial efficiency, liquidity position and long term solvency position.

III. RESEARCH GAP

In the review of various literatures it has been found that some of the research studies have involved to examine comparative evaluation of financial performance between Indian Public sector and private sector life insurance companies in a specific time frame. On the other hand, it has also been noticed that very few research studies have been carried out to measure comparative financial performance of private sector life insurance companies in India. Therefore, it is realised that our present research work was uncovered in the previous research studies. i.e., to make a comparative evaluation of financial performance of the private sector life insurance companies in India between the first and the second decades of the 21st century. The present study has effectively identified the research gap and also aimed at filling up this gap.

IV. OBJECTIVES OF THE STUDY

The study aims at addressing the following issues:

(1) To evaluate the financial performance of the select private life insurance companies of the first two decades of 21stCentury.

(2) To examine whether financial performance of the select private life insurance companies have been improved from 1st decade to 2nd decade of 21st Century.

V. RESEARCH METHODOLOGY

For the purpose of this study, secondary sources have been used. Data has been collected from the annual reports and public disclosure of different life insurance companies which are available in the companies' website. Data is also collected from IRDA annual reports. We have taken the help of reference of books, journals, different research studies and reports related to life insurance companies in India. Causal Research design is adopted for the study. Simple random sampling (without replacement) method is used. 10 private companies have been selected out of total population of 23 for the total study period of 20 years. The study period is sub divided into two decades to fulfil our objectives of the present study. 1st decade covers the period 2001-02 to 2010-11 and 2nd decade covers the period of 2011-12 to 2020-21.With a view to measuring financial performance of private sector life insurance companies, selected financial soundness indicators from CARAMEL framework is used to examine the various aspects of financial soundness and performance. The results are statistically tested with the help of descriptive statistics like mean, SD, CV and paired sample t-test have applied to draw logical inferences.

VI. RESEARCH HYPOTHESES

Hypothesis I

H_0: There is no significant difference in financial performance between 1st decade and 2nd decade.

H_1: There is significant difference in financial performance between 1st decade and 2nd decade.

Financial Performance of Private Life Insurance Companies

Present study seeks to examine the financial performance of private life insurance companies in India. The aim is to measure comparative financial performance between the first and the second decades of the 21stCentury of the select private sector life insurance companies in India. With this end in view, different financial indicators have been used from Caramel Framework.

Capital Adequacy, Asset Quality, Reinsurance & Actuarial Issues, Management soundness and efficiency, Profitability and liquidity position have been evaluated with a view to measuring the financial performance of the companies. Mean differences and CVs' of the two decades are calculated by framing suitable hypotheses. These hypotheses are statistically tested by paired sample t-test to reach the ultimate conclusion whether the mean difference (particular indicator) of the two decades of select companies are statistically significant or not. Again, to assess whether mean values of particular indicator have been improved from 1st decade to 2nd decade or not.

Financial Performance Based on Capital Adequacy Indicator

Net Premium to capital is one of the important indicator to assess the capital adequacy position of the companies. Mean values and CV of capital adequacy indicator Viz., Net Premium to Capital have been calculated with a view to assess financial performance of the selected life insurance companies which is depicted in Table 1.

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Table 1

Net premium to Capital	1st decade		2nd decade	
Name of the Company	Mean	CV (%)	Mean	CV (%)
HDFC	2.50	57.72	10.27	46.42
Maxlife	1.53	73.79	5.69	39.58
ICICI Prulife	5.96	79.23	15.42	38.90
Kotak Mahindra	3.40	91.17	10.95	56.71
Birla Sun Life	2.11	43.36	3.23	25.20
TATA AIA	1.56	50.27	2.32	**63.88**
SBI Life	4.79	90.24	23.16	59.20
Exide Life	0.85	66.72	1.29	27.54
BAJAJ Allianz Life	33.86	93.94	50.34	26.53
PNB Metlife	0.78	74.81	1.75	37.87

Sources: complied by SPSS

Table-1 shows that the mean values of net premium to capital of the private sector life insurance companies have been increased remarkably from 1st decade to 2nd decade. This indicates that the select companies have utilised its capital effectively for generating net premium. At the same time, the coefficient of variation (CV) in terms of variability of the sample private sector life insurance companies except TATA AIA has been decreased in the 2nd decade compared with 1st decade. This indicates that the management efficiency of the sample private sector life insurance companies except TATA AIA is effective.

Paired t-Test Results

This test statistic is useful to observe whether the particular indicator of the 1st decade has been improved in the 2nd decade or not. The null hypothesis is that the '*Net Premium/Capital'* of the 1st decade has not been improved in the 2nd decade against the alternative hypothesis of the '*Net Premium/Capital'* of the 1st decade has been improved in the 2nd decade. The results of paired t-test are shown in Table 2.

Table 2

Name of the Company	t - value	p-value Sig. (2-tailed)
HDFC	-6.852	0.000
Maxlife	-10.466	0.000
ICICI Prulife	-20.276	0.000
Kotak Mahindra	-5.648	0.000
Birla Sun Life	-3.850	0.004
TATA AIA	-1.663	**0.131**
SBI Life	-6.110	0.000
Exide Life	-3.266	0.010
BAJAJ Allianz Life	-2.161	**0.059**
PNB Metlife	-7.870	0.000

Sources: complied by SPSS

Table-2 shows that the mean values of *Net premium to capital* have been improved in the 2nd decade compared with the 1st decade in case of the sample companies except TATA AIA and Bajaj Allianz Life under the study because the probability of paired t-test statistic is less than 0.05. Therefore, null hypothesis is rejected in all the cases except TATA AIA and Bajaj Allianz Life insurance company.

Financial Performance Based on Asset Quality Indicator

The asset quality ratio is one of the key indicators for measuring the overall financial soundness of an insurance company. Asset quality means the quality of assets of the company which absorbs the financial strength of the company.

The ratio of '*Equities to Total Assets'* has been used to assess the asset quality position of the companies. This ratio indicates the amount of total assets funded by equity capital of the company. Mean values of this ratio for 1st and 2nd decade are shown in Table 3.

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Table 3

Equities to Total Assets	1st decade		2nd decade	
Name of the Company	Mean	CV (%)	Mean	CV (%)
HDFC	0.195	121.28	0.040	17.65
Maxlife	0.296	114.14	0.059	37.04
ICICI Prulife	0.100	110.84	0.048	9.51
Kotak Mahindra	0.328	131.77	0.081	10.99
Birla Sun Life	0.839	268.21	0.050	5.05
TATA AIA	0.236	120.01	0.069	22.92
SBI Life	0.252	106.34	0.052	7.58
Exide Life	0.264	119.16	0.069	19.04
BAJAJ Allianz Life	0.255	124.57	0.147	17.43
PNB Metlife	0.375	132.40	0.054	13.00

Sources: complied by SPSS

Table-3 depicts that the mean values and CV of Equities/Total Assets ratio of private life insurance companies. It is observed that mean values Equities/Total Assets of the sample life insurance companies have been decreased significantly in the 2nd decade compared with the 1st decade. The analysis reveals that the asset base of the company has been increasing over the period and capital levels in relation to assets are relatively smaller. This indicates efficient employment of capital to create a stronger asset base. On the other hand, variability the of the sample companies has also been decreased in the 2nd decade compared with the 1st decade which also implies that the asset base of the companies is relatively stronger.

Paired t-Test Results

This test statistic is useful to examine whether the particular indicator of the 1st decade has been improved in the 2nd decade or not. The null hypothesis is that the *(Equities)/Total Assets* of the 1st decade has not been improved in the 2nd decade against the alternative hypothesis of the *(Equities)/Total Assets* of the 1st decade has been improved in the 2nd decade.

Table 4

Name of the Company	t - value	p-value Sig. (2-tailed)
HDFC	2.017	0.074
Maxlife	2.344	**0.044**
ICICI Prulife	1.471	0.175
Kotak Mahindra	1.770	0.110
Birla Sun Life	1.109	0.296
TATA AIA	1.818	0.102
SBI Life	2.343	**0.044**
Exide Life	1.898	0.090
BAJAJ Allianz Life	1.008	0.340
PNB Metlife	2.034	0.073

Sources: complied by SPSS

Table-4 shows that the mean values of (Equities) to Total Assets *have not been improved* in the 2nd decade compared with the 1st decade of the select private life insurance companies except Max life and SBI Life insurance companies as the probability of paired t-test statistic is not less than 0.05. Therefore, null hypothesis is not to be rejected in all the cases except Max life and SBI Life insurance companies, whereas alternative hypothesis is rejected. This also indicates that though mean values and variability (CV) of Equities to Total Assets have been decreased during the 2nd decade; but these changes are not statistically significant.

Financial Performance Based on Reinsurance & Actuarial Issues Indicator

Another indicator to measure financial soundness of life insurers is *Net Technical Reserves to Average of Net Premium received* in last three years ratio. The ratio is an indicator of adequate mathematical reserves. The ratio is calculated as Net Technical Reserves/ Average of Net Premium received in last three years. Technical reserves are the amounts that insurance companies set aside from profits to cover claims. This ratio shows the amount of reserves created out of the average of net premium earned in last three years. The ratio is indicative of the development of reserves of the

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insurance companies over the years. It takes into account as to how much fund has been allocated for future purposes out of the average earnings of the last three years.

Table 5

Net Technical Reserves	1st decade		2nd decade	
Name of the Company	Mean	CV (%)	Mean	CV (%)
HDFC	0.008	121.95	0.097	68.97
Maxlife	0.012	117.64	0.053	64.57
ICICI Prulife	0.113	109.50	0.228	8.36
Kotak Mahindra	0.137	178.93	0.264	43.46
Birla Sun Life	0.024	176.93	0.090	39.85
TATA AIA	0.000	0.00	0.011	113.22
SBI Life	0.010	218.07	0.222	27.77
Exide Life	0.000	0.00	0.000	0.00
BAJAJ Allianz Life	0.229	125.25	1.087	34.56
PNB Metlife	0.000	0.00	0.021	143.46

Sources: complied by SPSS

The result of mean values of *Net Technical Reserves to Average Net Premium received in last three years* of the sample private life insurance companies is shown in Table 5. It is observed that mean values of the select companies have been increased in the 2nd decade compared with the 1st decade. The degree of variation (CV) is calculated between the two periods which shows that variability of the companies were decreased during the 2nd decade than the 1st decade except TATA AIA & PNB Metlife Insurance Company. A fairly high ratio reflects better technical reserves compared to the average net premium received in last three years, which expresses the financial soundness and dependability of an insurance company. The above result indicates that most of the companies were better in holding the marginally higher reserves relatively to average net premium received in last recent three years.

Paired t-Test Results

Here null hypothesis is that the *Net Technical Reserves to Average Net Premium received in last three years* of the 1st decade has not been improved in the 2nd decade against the alternative hypothesis of the *Net Technical Reserves to Average Net Premium received in last three years* of the 1st decade has been improved in the 2nd decade.

Table 6

Name of the Company	t - value	p-value Sig. (2-tailed)
HDFC	-4.783	0.001
Maxlife	-3.612	0.006
ICICI Prulife	-2.684	0.025
Kotak Mahindra	-1.403	**0.194**
Birla Sun Life	-3.280	0.010
TATA AIA	-2.790	0.021
SBI Life	-10.476	0.000
Exide Life	-5.832	0.000
BAJAJ Allianz Life	-2.195	**0.056**
PNB Metlife	-0.648	**0.533**

Sources: complied by SPSS

Table 6 shows that the mean values of *Net Technical Reserves to Average Net Premium received in last three years* have been improved in the 2nd decade compared with the 1st decade for the select companies except Kotak Mahindra, Bajaj Allianz Life & PNB Metlife under the study because the probability of paired t-test statistic is less than 0.05. Therefore, null hypothesis is rejected in all the cases except the above mentioned companies.

Financial Performance Based on Management Soundness Indicator

Management soundness and efficiency is another measure of financial performance of the life insurance companies. To examine the management efficiency, mean values and CV of Commission to Net premium ratio has been calculated. Table 7 depicts the results of two decades.

Table 7

Commission to Net Premium	1st decade		2nd decade	
Name of the Company	Mean	CV (%)	Mean	CV (%)
HDFC	0.102	45.29	0.046	13.56
Maxlife	0.177	47.27	0.082	15.53
ICICI Prulife	0.069	41.43	0.045	18.54
Kotak Mahindra	0.113	54.68	0.055	16.99
Birla Sun Life	0.129	31.21	0.052	13.84
TATA AIA	0.145	43.31	0.069	39.48
SBI Life	0.051	39.66	0.043	12.19
Exide Life	0.158	60.10	0.077	38.54
BAJAJ Allianz Life	0.158	50.49	0.036	28.22
PNB Metlife	0.195	40.91	0.055	7.50

Sources: complied by SPSS

Table 7 shows that mean values of *Commission to Net Premium* of the select private sector life insurance companies have been reduced in the 2nd decade compared with the 1st decade and coefficient of variation of the sample companies have also remarkably declined in the 2nd decade compared with the 1st decade which indicates the better management efficiency in regard to curtailment of commission expenses in respect of net premium earned by the company. It is envisaged that companies are less dependent upon the insurance agent to sale its policies to the customers. Therefore, companies have incurred less commission expenses towards the agent as a result lesser portion of Net Premium is expended towards meeting the commission expenses.

Table 8 represents the results of Paired t-test where null hypothesis is that mean values of commission to net premium has not been improved in the 2nd decade whereas alternative hypothesis is commission to net premium of the 1st decade has been improved in the 2nd decade.

Table 8

Name of the Company	t - value	p-value Sig. (2-tailed)
HDFC	4.227	0.002
Maxlife	4.053	0.003
ICICI Prulife	2.645	0.027
Kotak Mahindra	2.700	0.024
Birla Sun Life	5.959	0.000
TATA AIA	2.758	0.022
SBI Life	1.042	**0.325**
Exide Life	2.918	0.017
BAJAJ Allianz Life	4.867	0.001
PNB Metlife	5.380	0.000

Sources: complied by SPSS

The results of paired sample t-test have been tabulated in Table-8. shows that the mean values of Commission to Net Premium have been improved in the 2nd decade in case of the select companies except SBI life as the probability of paired t-test statistic is less than 0.05. Therefore, null hypothesis is rejected in all the cases except in cases of SBI Life Insurance Company.

Financial Performance Based on Earnings and Profitability Indicator

Return on equity ratio is one of the indicators of earnings and profitability of the company where it is assessed that how much the company is earning out of the capital invested as equity. It measures the efficiency of the management of the company is utilising its equity share capital to generate net profits. The ratio also implies the efficiency of the company in utilizing the equity shareholders' funds in the business operations. The higher ratio is always preferable. A higher ratio signifies the profitability of the business and more dividends to the equity shareholders. It is calculated by dividing the net profit with equity share capital. Here, net profit is profit after tax and equity share capital is the capital invested as paid up equity.

To examine the earnings and profitability of the companies mean values and CV of Return on Equity ratio has been calculated which is as shown in Table 9.

Table 9

Return on Equity	1st decade		2nd decade	
Name of the company	Mean	CV (%)	Mean	CV (%)
HDFC	-0.177	-42.31	0.448	40.18
Maxlife	-0.145	-84.41	0.245	26.58
ICICI Prulife	-0.293	-146.67	0.991	18.99
Kotak Mahindra	-0.097	-248.54	0.712	49.94
Birla Sun Life	-0.215	-70.54	0.126	65.32
TATA AIA	-0.198	-62.62	0.089	78.10
SBI Life	0.047	317.01	0.991	33.23
Exide Life	-0.240	-86.00	0.027	90.37
BAJAJ Allianz Life	0.688	376.48	5.614	35.39
PNB Metlife	-0.053	-236.15	0.039	50.94

Sources: complied by SPSS

Table-9 shows that the mean values of Return on Equity of the select private sector life insurance companies have been increased remarkably in the 2nd decade compared with the 1st decade. It indicates management of the company efficiently utilised its equity share capital to generate net profits. It is also found that coefficient of variation of the select life insurance companies have been increased in the 2nd decade except SBI Life and Bajaj Allianz life insurance Company. It has also been observed that mean values of Return on Equity of the select companies were negative during the 1st decade except Bajaj Allianz Life and this result (i.e., ROE) have been outstandingly improved of all the companies during the 2nd decade. This also implies that most of the companies have efficiently utilised the equity shareholders' fund in the business operations of generating profits. It is a gauge of company's profitability and how efficiently it generates profits. The higher ratio indicates the better is the position of the company.

Table 10 represents the results of Paired t-test where null hypothesis is that *Return on Equity* of the 1st decade has not been improved in the 2nd decade whereas alternative hypothesis is *Return on Equity* of the 1st decade has been improved in the 2nd decade.

Table -10

Name of the Company	t - value	p-value Sig. (2-tailed)
HDFC	-10.675	0.000
Maxlife	-12.215	0.000
ICICI Prulife	-7.174	0.000
Kotak Mahindra	-8.807	0.000
Birla Sun Life	-5.489	0.000
TATA AIA	-5.989	0.000
SBI Life	-12.599	0.000
Exide Life	-3.748	0.005
BAJAJ Allianz Life	-3.985	0.003
PNB Metlife	-2.438	0.037

Sources: complied by SPSS

It has been observed that mean values of Return on Equity of the sample companies have been improved in the 2nd decade under the study as probability of paired t-test statistic is less than 0.05. Hence, null hypothesis is rejected in all the cases. It implies that Profitability of the companies have been improved from 1st to 2nd decade.

Financial Performance Based on Liquidity Indicator

In the insurance business, the timing of insurance claims is uncertain. One cannot predict as to when the insured could claim for its insurance policy. Hence, an insurance company should look into its liquidity position. It should maintain its liquidity level to meet out its uncertain and unpredictable obligations. With a view to assessing liquidity position of the private life insurers between the 1st two decades of the 21st Century, 'Liquid liabilities to Total liabilities' ratio has been calculated. With regard to this ratio, lower is the value, better is the situation. Mean values and CV of this ratio is shown in Table 11.

Table 11

Liquid liabilities to Total Liabilities	1st decade		2nd decade	
Name of the Company	Mean	CV (%)	Mean	CV (%)
HDFC	0.068	18.35	0.037	13.78
Maxlife	0.096	19.02	0.043	32.59
ICICI Prulife	0.055	38.37	0.022	11.19
Kotak Mahindra	0.066	34.00	0.044	9.31
Birla Sun Life	0.081	45.69	0.028	28.15
TATA AIA	0.085	35.50	0.039	13.69
SBI Life	0.067	36.88	0.026	17.22
Exide Life	0.107	50.14	0.037	16.77
BAJAJ Allianz Life	0.086	46.87	0.034	35.53
PNB Metlife	0.081	44.02	0.043	11.11

Sources: complied by SPSS

Table 11 shows that the mean values of Liquid Liabilities to Total Liabilities of the sample private sector life insurance companies have been decreased remarkably in the 2nd decade compared with the 1st decade. At the same time, coefficient of variation of the sample private sector life insurance companies has also been decreased during the 2nd decade except Max Life Insurance Company, whereas variability has found an increasing trend. This result expresses that liquidity position of the sample companies improving during the 2nd decade in respect of this ratio. This analysis also indicates that the insurance companies have better capability to meet their short term and long term obligations in the 2nd decade compared with the 1st decade.

Table 12 shows the results of paired t-test where null hypothesis is that mean values of *Liquid Liabilities/Total Liabilities* of the 1st decade has not been improved in the 2nd decade, while alternative hypothesis is that mean values of *Liquid Liabilities to Total Liabilities* of the 1st decade has been improved in the 2nd decade.

Table -12

Name of the Company	t - value	p-value Sig. (2-tailed)
HDFC	6.812	0.000
Maxlife	10.410	0.000
ICICI Prulife	5.253	0.001
Kotak Mahindra	2.909	0.017
Birla Sun Life	5.669	0.000
TATA AIA	4.488	0.002
SBI Life	5.691	0.000
Exide Life	4.172	0.002
BAJAJ Allianz Life	3.764	0.004
PNB Metlife	3.438	0.007

Sources: complied by SPSS

Table 12 also exhibits that the mean values of *Liquid Liabilities to Total Liabilities* has been improved in the 2nd decade compared with the 1st decade in case of the sample companies under the study because the probability of paired t-test statistic is less than 0.05. Therefore, null hypothesis is rejected in all the cases.

VII. FINDINGS OF THE STUDY

1. Capital adequacy position of the private sector life insurance companies in terms of Net Premium to Capital have been improved in the 2nd decade with compared to 1st decade.
2. Asset quality position of the private sector life insurance companies have not been improved in the 2nd decade as compared to 1st decade in regard to Equities to Total Assets.
3. Reinsurance & Actuarial issues of the private sector life insurance companies in terms of Net Technical Reserves have been improved in the 2nd decade as compared to 1st decade.
4. Management soundness of the private sector life insurance companies in terms of Commission to Net Premium have been improved in the 2nd decade as compared to 1st decade.
5. Earnings & Profitability of the private sector life insurance companies in terms of Return on Equity (ROE) have been improved in the 2nd decade.
6. Liquidity position of the private sector life insurance companies in terms of Liquid Liabilities/ Total Liabilities have been improved in the 2nd decade.

VIII. CONCLUSIONS

It has been observed that financial performance of the private sector life insurance companies have been improved from 1st decade to 2nd decade in terms of capital adequacy, Reinsurance & actuarial issues, management soundness, earnings and profitability and liquidity. Since asset quality position of the companies has not been improved in the 2nd decade as compared to 1st decade stronger assets base are required to develop by the private life insurers. The management has to take a policy of less utilising shareholders' fund in total assets to recover the asset quality position, which is deteriorated in terms of 'Equities to Total Assets' ratio except Max life and SBI Life insurance company. The management is required to redesign their business policies in order to earn more premiums from the new policyholders for TATA AIA and Bajaj Allianz as 'Net premium to Capital ratio' is unsatisfactory. SBI Life Insurance Company has to take suitable measure in order to reduce commission expenses in view of improving net premium income. In view of maintaining satisfactory level of Net Technical Reserves in order to meet the unexpected claim from the policyholders, companies like Kotak Mahindra, Bajaj Allianz Life and PNB Metlife have to adopt workable feasible policies to accumulate Net Technical Reserves. The prospect of business of private life insurers in the insurance sector is growing significantly in the first two decades of 21st century and there is ample scope of wide marketing as large number of population is still uncovered.

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