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Efficiency Analysis of LICI and Select Private Sector Life Insurance Companies in India - A Comparative Study

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ABSTRACT
Insurance refers as a contract in which the insured transfers risk of potential loss to the insurer who promises to compensate the former upon suffering loss. The promise is called the insurer and the promise is called the insured. Insurance premium is the monetary consideration paid by the insured to the insurer for the cover granted by the insurance policy. The objective of the present study is to investigate the factors affecting efficiency of insurance companies operating in India. The target population of the study was 24 public and private life insurance companies and four important financial ratios. For which 10 years audited financial statements of the companies from 2009 to 2019 was studied for analysis. The secondary data were collected by reviewing of financial statements and related published and unpublished materials to achieve the objective of this study.

Keywords: *insurance, life insurance corporation of india, public, private, anova*

I. INTRODUCTION

The Indian Insurance Sector is basically divided into two categories i.e. Life Insurance and Non-Life Insurance. The Non-Life Insurance Sector is also known as General Insurance. Both the Life Insurance and the Non-Life Insurance is governed by the IRDAI. The insurance industry of India consists of 63 insurance companies of which 24 are in life insurance business and 39 are non-life insurers. Among the life insurers, Life Insurance Corporation of India (LICI) is the sole public sector company. The likelihood of an event or loss may be mathematically calculated or it may be based on the statistical results of experience in order to determine the amount of premiums that would be required to accumulate a common fund or pool, to meet the losses upon their arising. The roots of the modern Indian life insurance industry originated with the incorporation of the Life Insurance Corporation of India (LICI) in 1956, consolidating together one hundred and fifty-six Indian and sixteen non-Indian insurers. The LICI was the sole player in the market until the late 1990s when the insurance sector was reopened to the private sector. There are currently twenty-four players in the Indian Life Insurance Industry, the largest of which is the LICI, the only public sector life insurance company.

II. LITERATURE REVIEW

Ray and Pathak (2006) opined that ever since the privatization of the insurance sector in India in 2000, the industries have been witnessing the birth of numerous private players, mostly joint ventures between foreign insurance giants and Indian diversified conglomerates and each one is trying to make an inroad into the huge untapped market. Goswami (2007) examined that prior to privatization of insurance sector, Life Insurance Corporation of India was the sole player in the life insurance industry in India. In six years since the entry of private players in the insurance market, LICI has lost 29% market share to the private players, although both, market size and the insurance premium being collected, are on the rise Bhatia and Sharma (2008) highlighted in their study that the India's insurance sector which was a state monopoly until 1999, went a significant change in the post reform era and the business of private insurance companies increased rapidly overtime. Bedi and Singh (2011) analysed the overall performance of life insurance industry in India between pre and post economic reform era and revealed that the life insurance industry showed a huge growth in its performance because of Liberalization, Privatization and Globalisation. Gulhane (2013) discussed that there is significant difference in the growth rate of Fresh Business Premium between Public and Private Life Insurance Companies, there is significant difference in the growth of Number of policies

issued by Public and Private Life Insurance Companies and Life Insurance Corporation of India enjoys the dominance in the Life Insurance Sector. Long and Li (2017) employ a two-stage DEA model to evaluate the operating performance of insurance companies, and their results indicate that the proposed method is able to analyze with high accuracy. Ghosh (2020) observed that during the post reform period the growth of LICI business has grown significantly than private players at early period of reform but from 2014-15 the business growth of LICI declines significantly compare to private life insurance companies in India.

III. RESEARCH GAP

After studying the several literatures, a research gap is being observed in the area of efficiency analysis of life insurance companies. In our present study, we have tried our level best to fulfill the gap.

IV. OBJECTIVE OF THE STUDY

The objective of the present study is to make a comparative study on efficiency analysis of LICI and select Private Sector Life Insurance Companies operating in India.

V. RESEARCH METHODOLOGY

In our present study, descriptive statistics, ANOVA is employed in SPSS 20 Software. One Public and Twenty-Three Private Life Insurance companies and four important financial ratios are considered for the study. 10 years audited financial statements of the companies from 2009 to 2019 was studied for analysis. The secondary data were collected by reviewing of financial statements and related published and unpublished materials. The performance evaluation analysis is based on the following key points.

- **Descriptive Statistics:** Mean, Standard Deviation, Skewness and Kurtosis are being used for explaining the nature of the data.
- **ANOVA:** ANOVA provides a statistical test of whether two or more population means are equal or not and therefore generalizes the *t-test* beyond two means.
- **Post-HocTest:** To find out exactly, where the difference lies.
- **Period of Study :** 2009 - 2019

VI. DATA ANALYSIS AND FINDINGS

6.1 Analysis of Earning Per Share of Public and Private Insurance Companies

Earnings per share are company's net profit divided by the number of common shares it has outstanding. EPS indicates how much money a company makes for each share of its stock and is a widely used metric for estimating corporate value. A higher EPS indicates greater value because investors will pay more for a company's shares if they think the company has higher profits relative to its share price. Hence we take this variable in our analysis as it reflects better performance efficiency of the companies.

Table 1: Descriptive Statistics of Earnings Per Share of the Companies

Name of the Companies	Mean	Std. Deviation	Skewness	Kurtosis
Aegon Life Insurance Company Ltd.	-.3346	.3012	.1088	-.9635
Aviva Life Insurance Co India Ltd	-.3724	1.1534	-2.1592	4.1977
Bajaj Allianz Life Insurance Company Limited	54.0445	26.0823	-.9942	1.5515
Bharti Axa Life Insurance Company Ltd.	-1.5723	1.9466	-1.8448	2.7037
Birla Sun Life Insurance Co. Ltd.	.6420	1.9484	-1.4747	1.7579
Exide Life Insurance Company Ltd.	-.0971	.8340	-1.4248	1.1088
Future Generali India Life Insurance Company Ltd.	-.8388	.9055	-2.0923	5.1431
HDFC Life Insurance Co Ltd.	2.4461	2.9515	-.5842	-.7860

ICICI Prudential Life Insurance Company Ltd.	7.9092	5.3985	-1.8605	3.2130
IDBI Federal Life Insurance Co Ltd.	-.0530	1.5733	-.4488	-1.2606
Kotak Mahindra Life Insurance Company Ltd.	4.4925	2.8217	.4915	.1844
Life Insurance Corporation of India	726.4843	905.3962	1.2240	-.5494
Max Life Insurance Company Ltd.	1.8587	1.7616	-1.2507	2.1190
PNB Met Life India Insurance Co Ltd.	.2975	.2138	1.4751	1.1006
Reliance Nippon Life Insurance Company Ltd.	-.4001	3.5446	-1.6229	3.7845
Sahara India Life Insurance Company Ltd.	.7256	.6913	-1.0210	.8072
SBI Life Insurance Company Ltd.	6.9523	3.9337	-.2359	-.1739
Shriram Life Insurance Company Ltd.	2.5633	2.2020	-.4138	-1.0977
Star Union Dai-ichi Life Insurance Co Ltd.	.2388	1.9156	.9859	-.3358
TATA AIA Life Insurance Co Ltd.	.2636	1.7221	-1.5339	2.1059

Source: Self Calculation by Author

From the analysis done in Table - 1, we have observed that top 3 companies (Life Insurance Corporation of India Ltd., Bajaj Allianz Life Insurance Company and ICICI Prudential Life Insurance Company) having the highest earnings per share.

Table 2: Analysis of Variance of Earnings Per Share of the Companies

		Sum of Squares	**Mean Square**	**F**	**Sig.**
2009	Between Groups	1038349.468	519174.734	3.398	0.059
	Within Groups	2444364.268	152772.767		
	Total	3482713.736			
2010	Between Groups	1262276.600	631138.300	3.369	0.060
	Within Groups	2997438.573	187339.911		
	Total	4259715.173			
2011	Between Groups	1544530.999	772265.500	3.587	0.050
	Within Groups	3660157.989	215303.411		
	Total	5204688.988			
2012	Between Groups	4292.427	2146.214	2.070	0.157
	Within Groups	17624.672	1036.745		
	Total	21917.099			
2013	Between Groups	5165.208	2582.604	2.257	0.135
	Within Groups	19453.039	1144.296		
	Total	24618.247			
2014	Between Groups	7056.524	3528.262	2.788	0.090
	Within Groups	21510.109	1265.301		
	Total	28566.633			
2015	Between Groups	8812.420	4406.210	3.107	0.071
	Within Groups	24107.401	1418.082		
	Total	32919.821			
2016	Between Groups	17341.459	8670.730	3.360	0.059
	Within Groups	43872.660	2580.745		

	Total	61214.119			
2017	Between Groups	13607.165	6803.583	3.349	0 .059
	Within Groups	34539.541	2031.738		
	Total	48146.706			
2018	Between Groups	16676.642	8338.321	3.544	0.050
	Within Groups	39999.702	2352.924		
	Total	56676.344			
2019	Between Groups	18356.579	9178.289	2.163	0.161
	Within Groups	46670.367	4242.761		
	Total	65026.946			

Source: Self Calculation by Author

Table - 2 shows that ANOVA is significant for the year 2011 and 2018 hence we should go for post hoc test and homogeneity of variance test for these two years only to see where exactly the difference lies.

Table 3: Post Hoc Test of Earnings Per Share of the Companies

Dependent Variable			**Mean Difference**	**Std. Error**	**Sig.**
2011	Public Sector LICI	Old Private Sector LIC	781.49	305.45	0.05
		New Private Sector LIC	773.5	320.2	0.07
	Old Private Sector LIC	Public Sector LIC	-781.49	305.45	0.05
		New Private Sector LIC	-7.98	228.67	1
	New Private Sector LIC	Public Sector LIC	-773.5	320.2	0.07
		Old Private Sector LIC	7.98	228.67	1
2018	Public Sector LICI	Old Private Sector LIC	82.6322671*	31.93	0.05
		New Private Sector LIC	77.78	33.47	0.08
	Old Private Sector LIC	Public Sector LIC	-82.6322671*	31.93	0.05
		New Private Sector LIC	-4.85	23.9	0.98
	New Private Sector LIC	Public Sector LIC	-77.78	33.47	0.08
		Old Private Sector LIC	4.85	23.9	0.98

Source: Self Calculation by Author

Table - 3 shows that in the year2011 and 2018, mean of earnings per share of Public Sector LICI is greater than the Private Sector LIC which is statistically significant at 5% level of Significance. For the year except 2011and 2018 the mean difference of earnings per share of above 3 groups are not statistically significant.

6.2 Analysis of Insurance premium of Public and Private Insurance

Insurance premiums are paid for policies that cover healthcare, auto, home and life insurance. Once earned, the premium is income for the insurance company. It also represents a liability, as the insurer must provide coverage for claims being made against the policy.

Table 4: Descriptive Statistics of Insurance Premium of the Companies

Companies	Mean	Std. Deviation	Skewness	Kurtosis
Ageon life	412.55	167.413	-1.588	1.952
Aviva	1853.27	440.654	-0.074	-1.654
Bajaj Allianz	7822.45	2030.475	0.647	-0.9
Bharti Axa	1057.36	498.63	0.858	0.358
Aditya Birla Sunlife	5603.64	760.432	1.48	3.935
Canara HSBC	1868.18	858.614	0.02	0.859
DHFL Pramerica	664	687.818	0.878	-0.626
Edelweiss Tokio	291.73	280.216	1.285	1.332
Exide Life	1995.27	442.607	0.907	0
Future General	698.55	271.783	0.114	2.041
HDFC	14418.18	7242.605	0.89	0.191
ICICI Prudential Life	18598.09	5907.622	1.184	0.539
IDBI Federal	1060	514.46	0.517	-0.762
India First	1647.45	937.68	-0.314	-0.442
Kotak Mahindra	3956.36	1889.926	1.502	1.304
Max Life	8189.45	3302.926	0.736	-0.195
PNB Met Life	2876.91	821.28	1.535	1.984
Reliance Nippon	4855.27	960.415	1.196	0.08
Sahara	184.27	50.09	-0.397	-0.899
SBI life	15694	7733.753	1.351	1.299
Sri Ram Life	898.73	409.312	1.004	-0.116
Star Union Dai-ichi	1139.36	545.006	-0.442	0.56
Tata AIA	3358.82	1123.4	1.43	2.62
LIC	241618.2	57791.251	0.399	-0.929

Source: Self Calculation by Author

From the analysis (Table - 4), we have seen that top 3 companies (Life Insurance Corporation Ltd, ICICI Prudential Life Insurance Company and SBI Life Insurance Company) having the highest collection of Insurance premium.

Table 5: Analysis of Variance of Insurance Premium of the Companies

		Sum of Squares	df	Mean Square	F	Sig.
2009	Between Groups	5.7E+09	2	2849928565	3.421	0.052
	Within Groups	1.75E+10	21	833175603		
	Total	2.32E+10	23			
2010	Between Groups	7.79E+09	2	3895087147	3.327	0.056
	Within Groups	2.458E+10	21	1170621442		
	Total	3.237E+10	23			
2011	Between Groups	9.318E+09	2	4659015688	3.333	0.055
	Within Groups	2.935E+10	21	1397836730		
	Total	3.867E+10	23			
2012	Between Groups	9.014E+09	2	4507240758	3.22	0.06
	Within Groups	2.94E+10	21	1399878383		
	Total	3.841E+10	23			
2013	Between Groups	9.6E+09	2	4799982198	3.235	0.06
	Within Groups	3.116E+10	21	1483663804		
	Total	4.076E+10	23			
2014	Between Groups	1.221E+10	2	6104057274	3.173	0.063
	Within Groups	4.04E+10	21	1923940925		
	Total	5.261E+10	23			
2015	Between Groups	1.263E+10	2	6314133396	3.223	0.06
	Within Groups	4.114E+10	21	1958948573		
	Total	5.377E+10	23			
2016	Between Groups	1.583E+10	2	7917414215	3.282	0.057
	Within Groups	5.065E+10	21	2412052469		
	Total	6.649E+10	23			
2017	Between Groups	2.018E+10	2	10087816185	3.289	0.057
	Within Groups	6.442E+10	21	3067534498		
	Total	8.459E+10	23			
2018	Between Groups	2.286E+10	2	11431118195	3.337	0.055
	Within Groups	7.194E+10	21	3425851607		
	Total	9.481E+10	23			
2019	Between Groups	2.58E+10	2	12901483519	3.353	0.054
	Within Groups	8.079E+10	21	3847200146		
	Total	1.066E+11	23			

Source: Self Calculation by Author

Table - 5 shows that ANOVA is insignificant for the above analysis hence we don't go through with post hoc test.

6.3 Analysis of Commission of Public and Private Insurance

Table 6: Descriptive Statistic of Commission of the Companies

Companies	Mean	Std. Deviation	Skewness	Kurtosis
Ageon	154309	98690.065	0.482	-0.403
Aviva	1045821	1128181.9	2.542	7.265
Bajaj	3495935	2485181.8	1.754	3.125
Bharti Axa	861325	536851.14	0.903	-0.305
Birla Sunlife	3302606	1045767.7	0.734	-0.835
Canara HSBC	1123952	686849.49	0.536	-1.427
DLF Paramerica	318424	239565.27	1.272	0.935
Edelweiss	254996	253866.8	1.097	0.546
Future Generali	800627	682692.36	2.267	5.654
HDFC	7758712	3202299.2	1.333	1.108
ICICI	8700932	4067639.1	1.112	-0.731
IDBI	810044	187220.79	-0.479	-0.105
ING	1435958	251650.37	1.086	-0.12
India First	574457	441605.29	1.213	0.405
Kotak	2542506	1492663.7	0.805	-0.836
Max New York	7500034	1991914.5	-0.132	-1.207
Met Life	1781782	732214.42	0.396	-1.045
Reliance	3120132	1507917.8	1.073	0.483
Sahara India	126415	79043.98	0.295	-1.831
SBI life	8403896	3721268.5	1.296	0.625
Shriram	655913	272037.35	0.706	-0.859
Star Union	939270	450529.68	0.157	-1.829
Tata AIA	2800806	2194968.1	1.517	1.94
Life Insurance	1.6E+08	26690578	0.491	-0.249

Source: Self Calculation by Author

The analysis done in Table – 6 shows that the top 3 companies having the highest Commission are Life Insurance Corporation of India ltd., Bajaj Allianz Life Insurance Company and Birla Sun life Insurance Company.

Table 7: Analysis of Variance of Commission of the Companies

		Sum of Squares	df	Mean Square	F	Sig.
2009	Between Groups	3.091E+15	2	1.546E+15	3.082	0.050
	Within Groups	1.053E+16	21	5.014E+14		
	Total	1.362E+16	23			
2010	Between Groups	3.652E+15	2	1.826E+15	2.974	0.073
	Within Groups	1.289E+16	21	6.139E+14		
	Total	1.654E+16	23			
2011	Between Groups	4.051E+15	2	2.025E+15	2.952	0.074
	Within Groups	1.441E+16	21	6.861E+14		
	Total	1.846E+16	23			
2012	Between Groups	4.487E+15	2	2.244E+15	2.948	0.074
	Within Groups	1.598E+16	21	7.61E+14		
	Total	2.047E+16	23			
2013	Between Groups	5.826E+15	2	2.913E+15	3.002	0.071
	Within Groups	2.038E+16	21	9.703E+14		
	Total	2.62E+16	23			
2014	Between Groups	4.79E+15	2	2.395E+15	3.029	0.07
	Within Groups	1.661E+16	21	7.907E+14		
	Total	2.14E+16	23			
2015	Between Groups	5.014E+15	2	2.507E+15	3.028	0.07
	Within Groups	1.739E+16	21	8.28E+14		
	Total	2.24E+16	23			
2016	Between Groups	5.841E+15	2	2.92E+15	3.072	0.068
	Within Groups	1.996E+16	21	9.506E+14		
	Total	2.58E+16	23			
2017	Between Groups	7.158E+15	2	3.579E+15	3.136	0.064
	Within Groups	2.397E+16	21	1.141E+15		
	Total	3.113E+16	23			
2018	Between Groups	8.103E+15	2	4.052E+15	3.182	0.062
	Within Groups	2.674E+16	21	1.273E+15		
	Total	3.484E+16	23			
2019	Between Groups	9.736E+15	2	4.868E+15	3.224	0.050
	Within Groups	3.171E+16	21	1.51E+15		
	Total	4.145E+16	23			

Source: Self Calculation by Author

The analysis done in Table – 7 shows that ANOVA is significant for the year 2009 and 2019 hence we should go for post hoc test and homogeneity of variance test for these two years only to see where exactly the difference lies.

Table 8: Post Hoc Test of Commission of the Companies

Dependent Variable			Mean Difference (I-J)	Std. Error	Sig.
2009	Public Sector Holding LICI	Old Private Sector	30573263.85	13247875	0.077
		New Private Sector	30330823.15	13247875	0.079
	Old Private Sector	Public Sector Holding LIC	-30573263.85	13247875	0.077
		New Private Sector	-242440.7	10014452	1
	New Private Sector	Public Sector Holding LIC	-30330823.15	13247875	0.079
		Old Private Sector	242440.7	10014452	1
2019	Public Sector Holding LICI	Old Private Sector	53625045.95	22989855	0.073
		New Private Sector	54443564.15	22989855	0.068
	Old Private Sector	Public Sector Holding LIC	-53625045.95	22989855	0.073
		New Private Sector	818518.2	17378697	0.999
	New Private Sector	Public Sector Holding LIC	-54443564.15	22989855	0.068
		Old Private Sector	-818518.2	17378697	0.999

Source: Self Calculation by Author

Table - 8 shows that in the year 2009 and 2019 Public Sector LICI has more commission than Old Private Sector LIC which is statistically significant at 5% level of significance. For the year except 2009 and 2019 the commission of above 3 groups is not statistically significant.

6.4 Analysis of Return on Capital Employed of Public and Private Insurance

Table 9: Descriptive Statistics of Return on Capital Employed of the Companies

Companies	Mean	Std. Deviation	Skewness	Kurtosis
Aegon Life Insurance Company Ltd.	-3.3271	3.03149	0.133	-0.748
Aviva Life Insurance Co India Ltd	-19.224	53.3365	-2.086	3.443
Bajaj Allianz Life Insurance Company Limited	23.1154	23.1575	0.596	-0.624
Bharti Axa Life Insurance Company Ltd.	-369.57	691.036	-2.667	7.276
Birla Sun Life Insurance Co. Ltd.	-4.1474	70.4813	-1.827	2.754
Canara HSBC	9.91589	69.5471	-1.286	3.574
DHFL Pramerica	5.31785	41.741	0.496	5.124
Edelweiss Tokyo	-0.6045	32.324	0.321	4.254
Exide Life Insurance Company Ltd.	-47.095	117.012	-2.29	4.928
Future Generali India Life Insurance Company Ltd.	-111.02	127.383	-1.267	0.415
HDFC Life Insurance Co Ltd.	10.2132	42.0335	-1.531	1.312

ICICI Prudential Life Insurance Company Ltd.	24.7055	35.7345	-2.739	8.335
IDBI Federal Life Insurance Co Ltd.	-4.4828	25.974	-0.527	-1.324
India First	-0.6487	24.547	0.236	0.514
Kotak Mahindra Life Insurance Company Ltd.	22.6443	8.37122	0.107	1.98
Life Insurance Corporation of India	341.64	60.2481	0.661	-1.052
Max Life Insurance Company Ltd.	14.5947	23.3631	-2.582	7.1
PNB Met Life India Insurance Co Ltd.	9.91589	15.4755	2.751	8.045
Reliance Nippon Life Insurance Company Ltd.	-28.84	100.386	-2.467	6.857
Sahara India Life Insurance Company Ltd.	5.31785	6.81801	-0.522	0.856
SBI Life Insurance Company Ltd.	20.7012	8.50034	-2.326	6.64
Shriram Life Insurance Company Ltd.	11.7339	11.6978	-0.639	0.522
Star Union Dai-ichi Life Insurance Co Ltd.	-0.6045	12.8058	0.396	-1.263
TATA AIA Life Insurance Co Ltd.	-12.237	73.6431	-1.83	2.413

Source: Self Calculation by Author

The analysis done in Table - 9 shows the top 3 companies which have highest are Return on Capital Employed are Life Insurance Corporation of India Ltd., ICICI Prudential Life Insurance Company and Bajaj Allianz Life Insurance Company.

Table 10: Analysis of Variance of Return on Capital Employed of the Companies

		Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
2009	Between Groups	472787.98	2	236393.99	0.873	0.435
	Within Groups	4601659.6	17	270685.86		
	Total	5074447.6	19			
2010	Between Groups	180035.58	2	90017.791	1.774	0.20
	Within Groups	862440.17	17	50731.775		
	Total	1042475.7	19			
2011	Between Groups	95266.168	2	47633.084	3.397	0.057
	Within Groups	238375.91	17	14022.112		
	Total	333642.08	19			
2012	Between Groups	42500.528	2	21250.264	4.368	0.029
	Within Groups	82699.112	17	4864.654		
	Total	125199.64	19			
2013	Between Groups	26081.121	2	13040.56	3.816	0.043
	Within Groups	58096.243	17	3417.426		
	Total	84177.364	19			
2014	Between Groups	34335.394	2	17167.697	3.758	0.045
	Within Groups	77653.641	17	4567.861		
	Total	111989.03	19			
2015	Between Groups	33001.282	2	16500.641	3.569	0.051

	Within Groups	78586.312	17	4622.724		
	Total	111587.6	19			
2016	Between Groups	61946.344	2	30973.172	3.972	0.038
	Within Groups	132567.69	17	7798.099		
	Total	194514.03	19			
2017	Between Groups	45328.998	2	22664.499	3.961	0.039
	Within Groups	97282.38	17	5722.493		
	Total	142611.38	19			
2018	Between Groups	50502.196	2	25251.098	4.069	0.036
	Within Groups	105487.31	17	6205.136		
	Total	155989.51	19			
2019	Between Groups	42658.235	2	21329.117	2.369	0.126
	Within Groups	144070.42	16	9004.401		
	Total	186728.66	18			

Source: Self Calculation by Author

Table - 10 exhibits that ANOVA is significant for the years 2012, 2013, 2014, 2016, 2017and 2018. Hence we should go for post hoc test and homogeneity of variance test for those years only to see where exactly the difference lies.

Table 11: Post Hoc Test of Return on Capital Employed of the Companies

Dependent Variable			**Mean Difference (I-J)**	**Std. Error**	**Sig.**
2012	Public Sector LICI	Old Private Sector	70.728068	45.913142	0.298
		New Private Sector	136.8901575*	48.13005	0.029
	Old Private Sector	Public Sector LIC	-70.728068	45.913142	0.298
		New Private Sector	66.16209	34.371731	0.162
	New Private Sector	Public Sector LIC	-136.8901575*	48.13005	0.029
		Old Private Sector	-66.16209	34.371731	0.162
2013	Public Sector LICI	Old Private Sector	74.079307	38.482264	0.162
		New Private Sector	111.2870521*	40.340374	0.034
	Old Private Sector	Public Sector LIC	-74.079307	38.482264	0.162
		New Private Sector	37.207745	28.808789	0.419
	New Private Sector	Public Sector LIC	-111.2870521*	40.340374	0.034
		Old Private Sector	-37.207745	28.808789	0.419
2014	Public Sector LICI	Old Private Sector	90.514637	44.490522	0.134
		New Private Sector	127.8582816*	46.638739	0.035
	Old Private Sector	Public Sector LIC	-90.514637	44.490522	0.134
		New Private Sector	37.343644	33.306722	0.515
	New Private Sector	Public Sector LIC	-127.8582816*	46.638739	0.035
		Old Private Sector	-37.343644	33.306722	0.515
2016	Public Sector	Old Private Sector	145.59324	58.130683	0.056

	LICI	New Private Sector	165.5072258*	60.937514	0.037
	Old Private Sector	Public Sector LIC	-145.59324	58.130683	0.056
		New Private Sector	19.913989	43.51809	0.892
	New Private Sector	Public Sector LIC	-165.5072258*	60.937514	0.037
		Old Private Sector	-19.913989	43.51809	0.892
2017	Public Sector LICI	Old Private Sector	122.0109	49.797057	0.063
		New Private Sector	142.9679290*	52.2015	0.035
	Old Private Sector	Public Sector LIC	-122.0109	49.797057	0.063
		New Private Sector	20.957034	37.279328	0.842
	New Private Sector	Public Sector LIC	-142.9679290*	52.2015	0.035
		Old Private Sector	-20.957034	37.279328	0.842
2018	Public Sector LICI	Old Private Sector	131.00794	51.854529	0.054
		New Private Sector	149.7092220*	54.358317	0.034
	Old Private Sector	Public Sector LIC	-131.00794	51.854529	0.054
		New Private Sector	18.701284	38.819603	0.881
	New Private Sector	Public Sector LIC	-149.7092220*	54.358317	0.034
		Old Private Sector	-18.701284	38.819603	0.881

Source: Self Calculation by Author

Table - 11 exhibits that in the year 2012, 2013, 2014, 2016, 2017 and 2018 Public Sector LICI has more Return on Capital Employed than Old Private Sector LIC which is statistically significant at 5% level of significance. For the year except 2012, 2013, 2016, 2017 and 2018 the Return on Capital Employed of above 3 groups are not statistically significant.

VII. CONCLUSION

- In the year 2011 and 2018, mean of earnings per share of Public Sector LIC is greater than the Private Sector LIC, which is statistically significant at 5% level of Significance.
- From the analysis (Table 1), we have observed that top 3 companies (Life Insurance Corporation of India Ltd., Bajaj Allianz Life Insurance Company and ICICI Prudential Life Insurance Company) having the highest earnings per share.
- From the analysis (Table - 4), we have seen that top 3 companies (Life Insurance Corporation Ltd, ICICI Prudential Life Insurance Company and SBI Life Insurance Company) having the highest collection of Insurance premium.
- The analysis (Table - 6) shows that the top 3 companies having the highest Commission are Life Insurance Corporation of India ltd., Bajaj Allianz Life Insurance Company and Birla Sun life Insurance Company.
- In the year 2009-2010 and 2019-2020 Public Sector LICI has more commission than Old Private Sector LIC which is statistically significant at 5% level of significance. For the year except 2009-2010 and 2019-2020 the commission of above 3 groups is not statistically significant.
- The analysis (Table - 9) shows the top 3 companies which have highest are Return on Capital Employed are Life Insurance Corporation of India Ltd., ICICI Prudential Life Insurance Company and Bajaj Allianz Life Insurance Company.
- In the year 2012, 2013, 2014, 2016, 2017 and 2018, Public Sector LICI has more return on capital employed than Old Private Sector LICI which is statistically significant at 5% level of significance. For the year except 2012, 2013, 2016, 2017 and 2018, the return on capital employed of above 3 groups are not statistically significant.

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