

An Examination of the Indian Private and Public Life Insurance Companies Performance: A Study from the Standpoint of Premium Collection

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Abstract

The life insurance business in India has gone through a series of reforms, including the privatization of the sector, resulting in increased competition and premium collection. To assess the performance of Indian life insurance companies, data from 2013-14 to 2020-21 was analyzed using quantitative research methods. Descriptive statistical analysis, principal component analysis, and two-sample t-tests with equal variance are used to examine and compare the premium collection of public and private insurance companies, identify the most competent private insurance company, and investigate the impact of the COVID-19 pandemic on policy sales and premium collection. The results showed that public insurance companies outperformed private insurance companies in terms of premium collection, and no significant difference was observed in the premium collection or policy sales between the pre-and post-pandemic periods.

Key Words: Life Insurance, Premium, Pre-and Post Pandemic

1.Introduction

Any country's economic growth is significantly influenced by the insurance sector. The primary role of any insurance product is to protect the insurer from any unexpected loss. Besides that insurance industry act as a medium to promote saving and contributes to developing the capital market in the country. With the establishment of the Insurance Regulatory and Development Authority of India (IRDAI), India began reforms in the insurance industry. The act was introduced to regulate the insurance market in the best interest of the nation and society. Besides that, the act also aims to protect the interest of insurance policyholders. The Malhotra Committee's (2000) report advocated for private firms to enter the life insurance industry. With time, more private life insurance firms began conducting business in India. The life insurance sector reforms have increased the competition manifold. At present, there is only one public life insurance company.

In light of this, it is important to understand how both private and public life insurance businesses are faring in this fiercely competitive market. The purpose of the current research paper is to compare the performance of private and public sector life insurance organizations from the perspective of insurance premiums collection. In addition, the study will look at how the pandemic has affected the expansion of both commercial and public life insurance firms. The study is significant because it will aid in determining how private and public insurance companies are faring in the post-liberalized age.

1.1 Research Objectives

1. To compare the average premium collection between private and public insurance companies in India.
2. To identify the most competent private insurance company in terms of premium collection using principal component analysis.

3. To examine the number of life insurance policies sold during pre and post-pandemic periods.
4. To compare the change in the premium collection between pre and post-pandemic periods in the life insurance sector.

2. Literature Review

In this section, we aim to provide a review of relevant literature that examines the performance of the Indian life insurance industry in terms of premium collection.

Following the liberalization period, the life insurance market in India became highly competitive. Kumari (2002) conducted a descriptive study using data from 2001 to 2010 and acknowledged that after the privatization of the insurance business, the performance of the sector had significantly improved. The findings revealed a positive relationship between premium collection and the growth and expansion of the insurance business. Additionally, research conducted by Krishnamurthy et al. (2005), Bajpai and Mazhar (2019), and Singh and Ali (2020) confirmed that the Indian life insurance business is performing well and steadily growing in terms of premium collection. Bedi and Singh (2011) observed that the Indian life insurance industry had overcome several obstacles to achieve its current status, and that privatization had resulted in a manifold increase in premium collection, leading to the growth and expansion of the business. Bawa and Chattha (2013) measured the financial performance of the Indian life insurance industry using various ratios and linear regression and found that the profitability of the sector is positively impacted by the liquidity and size of the business, but negatively impacted by the capital and the amount of insurance premium collected. Ansari and Fola (2014) used the CAMEL model to assess the performance of insurance companies and found that significant differences exist between private and public sector life insurance businesses in terms of premium collection. Vijay (2019) employed an output maximization model and found that private-sector insurance companies performed better than public-sector companies due to a lower number of average claims. Chandrapal (2019) used MANOVA to examine the performance of the Indian life insurance industry and found that

liberalization had a positive impact on the industry's performance, resulting in a significant increase in premium collection. The study by Parvathi and Lalitha (2021) revealed that the life insurance business in India experienced a surge in sales during the pandemic, with a significant increase in premium collection and the sale of life insurance products. Similarly, Tripathi and Dixit (2021) found that the pandemic had a positive impact on the life insurance business, leading to a significant increase in the number of policies sold.

2.1 Hypotheses

The researcher is guided by the following alternative hypotheses:

H1: The sales of policies during the pre and post-pandemic period differ significantly.

H2: The premium collection during the pre-and post-COVID periods shows a significant difference.

3. Research Methodology

The research methodology used in the study is a quantitative research approach with a descriptive research design. The data was obtained from the website of the IRDAI, covering the period from 2013-14 to 2020-21 and including one public insurance company and twenty-three private insurance companies. Secondary data analysis was conducted using mean, principal component analysis, and a two-sample t-test with equal variances assumed. To determine the number of life insurance policies sold before and after the pandemic, the study used the average number of policies sold in 2017-18 and 2018-19 and between 2019-20 and 2020-21, respectively. The study utilized Excel and SPSS software for data analysis.

4. Analysis and Findings

The secondary data collected from the IRDAI website is analyzed here to draw some meaningful conclusions.

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Table 1: Life insurance Premium Collection Figures in Rs. Crore.

	Insurer	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Public	Life Insurance Corporation of India	236,942.30	239,667.65	266,444.21	300,487.36	318,223.21	337,505.07	379,389.60	403,286.55
Private	Aditya Birla Sun Life Insurance Company Ltd.	4,833.05	5,233.22	5,579.71	5,723.96	5,903.00	7,511.26	8,009.97	9,775.22
	Aegon Life Insurance Company Ltd.	453.00	559.20	501.60	450.72	531.21	568.88	575.74	526.07
	Ageas Federal Life Insurance Company Ltd.	826.25	1,069.62	1,239.67	1,565.19	1,783.24	1,932.52	1,842.51	1,958.64
	Aviva Life Insurance Company India Ltd.	1,878.10	1,796.25	1,493.15	1,336.51	1,344.22	1,264.94	1,193.64	1,165.25
	Bajaj Allianz Life Insurance Company Ltd.	5,843.14	6,017.30	5,897.31	6,183.32	7,578.37	8,857.16	9,752.53	12,024.84
	Bharti AXA Life Insurance Company Ltd.	872.65	1,053.32	1,208.33	1,396.50	1,684.39	2,075.50	2,187.26	2,280.82
	Canara HSBC OBC Life Insurance Company Ltd.	1,823.42	1,657.02	2,059.96	2,294.71	2,781.06	3,490.74	3,942.82	5,116.03
	Edelweiss Tokio Life Insurance Company Ltd.	110.90	193.08	310.07	441.33	638.26	919.31	1,048.48	1,248.24
	Exide Life Insurance Company Ltd.	1,830.67	2,027.48	2,046.99	2,408.58	2,531.89	2,886.20	3,219.59	3,324.75
	Future General India Life Insurance Company Ltd.	634.16	604.25	592.50	739.85	992.29	1,243.16	1,480.25	1,322.19
	HDFC Life Insurance Company Ltd.	12,062.90	14,829.90	16,312.98	19,445.49	23,564.41	29,186.02	32,706.89	38,583.49
	ICICI Prudential Life Insurance Company Ltd.	12,428.65	15,306.62	19,164.39	22,354.00	27,068.77	30,929.77	33,430.70	35,732.82
	IndiaFirst Life Insurance Company Ltd.	2,143.36	2,034.11	1,967.40	2,265.17	2,309.01	3,212.55	3,360.44	4,055.50
	Kotak Mahindra Life Insurance Ltd.	2,700.79	3,038.05	3,971.68	5,139.55	6,598.67	8,168.29	10,340.08	11,100.22
	MaxLife Insurance Company Ltd.	7,278.54	8,171.62	9,216.16	10,780.40	12,500.89	14,575.23	16,183.65	19,017.90
PNB Metlife India Insurance Company Ltd.	2,240.59	2,461.19	2,827.83	3,236.08	3,953.51	4,777.20	5,506.96	6,032.82	
Pramerica Life Insurance Company Ltd.	305.86	735.10	920.21	1,142.10	1,844.46	1,816.86	1,228.06	993.60	

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Reliance Nippon Life Insurance Company Ltd.	4,283.40	4,621.08	4,398.12	4,026.82	4,069.37	4,357.93	4,440.94	4,736.45
Sahara India Life Insurance Company Ltd.	204.63	166.86	157.05	153.94	112.03	100.71	87.43	73.20
SBI Life Insurance Company Ltd.	10,738.60	12,867.11	15,825.36	21,015.13	25,354.19	32,989.42	40,634.73	50,254.17
Shriram Life Insurance Company Ltd.	594.24	734.66	1,022.11	1,207.94	1,497.04	1,699.46	1,729.05	2,018.53
Star Union Dai-ichi Life Insurance Company Ltd.	948.75	1,134.68	1,307.47	1,510.88	1,783.01	1,994.07	2,310.36	2,998.62
TATA AIA Life Insurance Company Ltd.	2,323.70	2,122.66	2,478.96	3,171.08	4,162.95	6,069.76	8,308.51	11,105.09
Private Sector Total	77,359.36	88,434.36	100,499.03	117,989.25	140,586.23	170,626.96	193,520.59	225,444.48

Source: IRDAI Website

Table 1 presents the life insurance premium collection data for both public and private insurance companies. Despite the significant increase in the number of private life insurance companies, their total premium collection falls significantly short when compared to public life insurance companies. The public life insurance business has a total premium collection of Rs. 2,481,945.95 Crore, while the private life insurance business has a total premium collection of Rs. 1,114,460.26 Crore. This demonstrates that the growth and expansion of public life insurance businesses is superior to that of private life insurance businesses, as higher premium collection results in faster growth and development. The average premium collection of the public sector undertaking, Life Insurance Company (LIC), is Rs. 310243.24 Crore, while the average premium collection of the 23 private insurance companies is Rs. 6056.85 Crore, indicating that the public life insurance business is performing remarkably well in terms of premium collection. A principal component analysis using varimax rotation with Kaser normalization was conducted to identify the top-performing private-sector insurance companies. Based on the component matrix in Table 2, it was found that Edelweiss Tokio Life Insurance Company Ltd, HDFC Life Insurance Company Ltd, PNB Metlife India Insurance Company Ltd, Max Life Insurance Company Ltd, and Kotak Mahindra Life Insurance Ltd scored a value of .051. This score indicates that these five private insurance companies are performing equally well with regard to premium collection, while the remaining private insurance companies have scored lower than 0.051 in the component matrix. Therefore, it can be concluded that these five private life insurance companies are among the most successful in terms of premium collection.

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Table 2: Extract of Component Matrix Result

Private Life Insurance Company	Component Matrix Score
Edelweiss Tokio Life Insurance Company Ltd.	.051
HDFC Life Insurance Company Ltd.	.051
PNB Metlife India Insurance Company Ltd.	.051
MaxLife Insurance Company Ltd.	.051
Kotak Mahindra Life Insurance Ltd.	.051

Source: Prepared by the Researcher

Life Insurance Policy Sell in the Pre and Post-Pandemic Era: Table 3 displays the average number of life insurance policies sold by the insurer in the periods before and after the COVID-19 pandemic.

TABLE 3: Average Number of Life Insurance Policies Sell (Number of policies '000s)

Insurance Companies	Pre-Pandemic	Post-Pandemic
Life Insurance Corporation of India	1,785	1,658
Aditya Birla Sunlife Insurance Company Ltd.	1,574	4,798
Aegon Life Insurance Company Ltd.	640	72
Ageas Federal Life Insurance Company Ltd.	47,156	11,061
Aviva Life Insurance Company India Ltd.	1,138	1,207
Bajaj Allianz Life Insurance Company Ltd.	1,498	3,535
Bharti AXA Life Insurance Company Ltd.	917	865
Canara HSBC OBC Life Insurance Company Ltd.	15,233	13,877
Edelweiss Tokio Life Insurance Company Ltd.	3,679	2,458
Exide Life Insurance Company Ltd.	671	377
Future Generali India Life Insurance Company Ltd.	1,418	1,177
HDFC Life Insurance Company Ltd.	7,005	3,747
ICICI Prudential Life Insurance Company Ltd.	11,797	4,151
IndiaFirst Life Insurance Company Ltd.	10,625	6,423
Kotak Mahindra Life Insurance Ltd.	2,211	1,465
MaxLife Insurance Company Ltd.	15,408	11,914
PNB Metlife India Insurance Company Ltd.	11,425	8,124
Pramerica Life Insurance Company Ltd.	1,621	193
Reliance Nippon Life Insurance Company Ltd.	634	710
SBI Life Insurance Company Ltd.	11,296	12,714
Shriram Life Insurance Company Ltd.	23,723	25,507
Star Union Dai-ichi Life Insurance Company Ltd.	14,675	15,650

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TATA AIA Life Insurance Company Ltd.	12,690	19,652
Life Insurance Corporation of India	1,785	1,658
Aditya Birla Sunlife Insurance Company Ltd.	1,574	4,798

Source: Prepared by the Researcher

TABLE 4: t-TEST: Two-Samples Assuming Equal Variances

	<i>Pre-Pandemic</i>	<i>Post Pandemic</i>
Mean	8644.298642	6579.818659
Variance	113968962.4	49715904.18
Observations	23	23
Pooled Variance	81842433.3	
Hypothesized Mean Difference	0	
Df	44	
t Stat	0.774	
P(T<=t) one-tail	0.222	
t Critical one-tail	1.680	
P(T<=t) two-tail	0.443	
t Critical two-tail	2.015	

The results of the statistical analysis presented in Table 4 show that there is no significant difference in the number of insurance policy sales between the pre-covid (M = 8644, SD = 10676) and post-covid (M = 6579, SD = 7051) eras. In addition, $t(44) = 0.774$, $p = .443$ (Table 4). This indicates that the pandemic has had no unfavorable influence on the insurance business.

Source: Prepared by the Researcher

TABLE 5: t-TEST-Two-Sample Assuming Equal Variances

	<i>Pre-Pandemic</i>	<i>Post-Pandemic</i>
Mean	21172.17	25034.19
Variance	4634532303.82	6238146856
Observations	24	24
Pooled Variance	5436339580	
Hypothesized Mean Difference	0	
Df	46	
t Stat	-0.181	
P(T<=t) one-tail	0.428	
t Critical one-tail	1.679	
P(T<=t) two-tail	0.857	
t Critical two-tail	2.013	

Table 5 illustrates the result of t-test in regard to the premium collection between the pre-pandemic and post-pandemic periods. The findings indicate that there is no significant difference in the premium income between pre-pandemic (M=21172, SD=68077) and post

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Source:Prepared by the Researcher

pandemic (M = 25034, SD=78981) and the, $t(46) = -0.181$, $p = .857$. The p value is 0.857thus, the null hypothesis is not rejected, which means that there is no statistically significant difference in the premium collection between pre and post-pandemic eras. Therefore, it can be concluded that the outbreaks of pandemics have no negative impact on insurance companies' premium collection.

5. Conclusion

The life insurance business has undergone significant changes post-liberalization. The reforms in the insurance sector have led to increased competition among companies in both the public and private sectors. The results of the study indicate that public-sector insurance companies have better premium collections than private-sector companies. The principal component analysis identified five private sector companies that performed well in terms of premium collection. The t-test results showed that the pandemic had no negative impact on insurance companies' premium collection and policy sales, as there was no significant difference observed in the pre and post-pandemic periods. The overall conclusion is that the life insurance sector is performing well in the post-liberalized era.

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