



An Analysis Of The Insurance Sector In India

Ms. Eshita Sahu^{1*}, Dr. Sumeet Khurana², Dr. Bhanu Pratap Singh³

^{1*}Assistant professor (Department of Management Studies), Medicaps University, Indore (MP)

²Professor & Director (FMS) Shivajirao Kadam Institute of Technology and Management, Indore (MP)

³Assistant Professor, Institute of Management Studies, DAVV, Indore (MP)

Citation: Ms. Eshita Sahu et al. (2023), An Analysis Of The Insurance Sector In India, Educational Administration: Theory and Practice, 29(4), 1321-1326

Doi: 10.53555/kuey.v29i4.6335

ARTICLE INFO

ABSTRACT

There is more to life insurance than meets the eye. Mobilizing resources for development is important but ensuring the safety of citizens is even more crucial. It bridges the gap between now and then. India now has one of the world's most rapidly expanding economies. It has broken into the top ten economies in the world in terms of GDP and is now the third biggest economy in Asia. In the fiscal years of 2010 and 2011, the service sector contributed 9.30% to GDP growth. The insurance sector in India is experiencing developments that are affecting the market, similar to other parts of the world. The insurance sector places a significant focus on expansion. India's life insurance market has experienced multiple changes in the past decade. Insurers are now confronted with a new challenge due to the economic changes resulting from liberalization, privatization, and globalization. To meet its clients' needs and wishes, it must enhance its competitiveness. India's life insurance sector offers a substantial opportunity for both domestic and international investors, given the country's large population and substantial untapped market. Operational changes, like selling new policies, hiring agents, paying agent commissions, and assessing maturity value, have impacted the profitability of life insurance companies. Private sector companies have had greater growth in their insurance operations compared to public sector entities.

Keywords: GDP, profitability, competitive, Life Insurance, growth, economy.

Introduction:

One of the most fundamental components of India's service economy is the life insurance industry. Our nation's economic progress is greatly impacted by it. Not only does it protect people from potential dangers in life, but it also serves as a medium for saving and lending money, encourages investment, and keeps financial markets stable. In turn, this raises people's living standards and creates long-term invertible cash for country construction.

The role that financial systems play in facilitating the accumulation of capital and the widespread adoption of new technology makes them an essential component of economic growth processes. In addition to fostering economic growth, well-developed financial systems that efficiently carry out their tasks can enhance efficiency. Among these purposes is the promotion of individual savings accounts as a means to larger investment vehicles. Investments are spread out to lower the risk for depositors, which in turn lowers the expenses for specialized organizations to gather and analyses project-related information.

The previous ten years have been incredibly transformative for India's life insurance market. As a result of changes brought about by liberalization, privatization, and globalization, insurers now face a different set of challenges. It needs to step up its game if it wants to meet the demands and wants of its customers. Customers' awareness of the range of insurance options and the rates provided by various providers was enhanced by the updates. Customers are knowledgeable about their rights, available grievance redress channels, and the gradual deregulation and simplification of insurance product pricing. The technological competence and extensive experience of foreign companies collaborating with Indian firms have significantly transformed various parts of the industry.

Life Insurance Company of India:

Which innovative insurance company provided affordable products to Indians? Originated in 1871 as the

Bombay Mutual Life Assurance Society. Life insurance was predominantly accessible to affluent individuals living in large urban areas over the following century. The LIC Act of 1956 created the Life Insurance Corporation of India with the intention of making life insurance accessible to all sections of the Indian people. The Lok Sabha and the Rajya Sabha passed the Insurance Regulatory and Development Authority (IRDA) Bill in December 1999, allowing multinational corporations and private individuals to participate in India's insurance market. The quantity of private enterprises entering the market has consistently increased since the enactment of this legislation. India had 23 private enterprises as of March 31, 2011.

Literature Review:

Gamarra (2017) evaluated the cost-effectiveness and profit-maximizing strategies of 3 categories of German LIC: direct insurers, multichannel insurers, and independent agent insurers. For the period from 1997 to 2015, a subset of German life insurers had their efficiency estimated using nonparametric DEA. She tested a number of hypotheses and came up with economic data that supports the coexistence of diverse distribution systems, namely that specialist insurers do not have competitive performance advantages. She went on to say that the German life insurance sector has proof of economies of scale.

Tone and Sahoo (2022) used a new cost efficiency model to analyze the performance of Life Insurance Corporation (LIC) of India, making them the pioneers in studying life insurance sector efficiency in an Indian setting. Over the course of the 19 years covered by the research, the cost-effectiveness evaluations varied considerably. When LIC upgraded its operations, it paid a hefty sum in fixed costs. As allocative inefficiencies increased after 1994–1995, performance began to fall. There is reason to be hopeful that LIC is beginning to see the benefits of this upgrading, as there was a notable improvement in cost efficiency in 2000 and 2001. This will provide them an advantage when they face rival teams in the near future. Results from a sensitivity analysis corroborate the study's key findings.

Research Necessity:

The life insurance industry in India presents a significant opportunity for both domestic and international investors due to the country's massive population and sizable untapped market. Life Insurance Corporation of India was the sole public insurer in the country up till 1999. Numerous advantages have resulted from the insurance sector's liberalization and privatization, which has attracted 23 private participants thus far. The state-owned Life Insurance Company must now reevaluate its guiding principles and operational procedures to meet the challenge posed by private sector businesses.

Following liberalization, the state life insurer saw a steady decline in its market share as a result of the private sector's inefficient marketing tactics. All the major competitors in the industry are always innovating new plans, lowering their rates, and improving their services in an effort to keep their current customers and attract new ones. Product design, marketing, individualized service, and claim/settlement procedures all need proactive strategies if the firm is to survive. The efficiency and effectiveness of the insurers' work and finances can be severely affected by this. This prompted the researcher to assess the performance of these enterprises in India after liberalization.

This raised the following questions:

How has liberalization affected the development and expansion of life insurance firms in India? How are life insurance businesses in India managing their finances?

Purpose of Investigation:

Here are the study's objectives:

- To examine the development and advancement of Indian life insurance industry after liberalization.
- Specifically, we want to take a look at what makes Indian life insurance businesses tick financially.
- The purpose of this study is to analyse insurance businesses in India and provide recommendations for their development.

Hypothesis of the Study:

We have formulated the following hypothesis in this investigation.

The following metrics are statistically identical: gross premium, number of agencies, claims paid, operational costs, cost of commission, investment revenue, number of policies, and profitability.

Research Methodology:

The success or failure of India's life insurance providers is ascertained through analytical research.

Data and Sources of Data:

Secondary data is used in this investigation. All of the life insurance companies' statement of accounts, annual reports, and bulletins as well as the Insurance Regulatory Development Authority's (IRDA) databases were combed through to compile the data used in this study.

Period of the Study:

The research spans the ten-year accounting period beginning in 2014–2015 and ending in 2022–2023.

Sampling Design

Twelve life insurance firms were chosen at random from among twenty-four in India using the purposive sampling technique. Life insurance firms are chosen according to their incorporation dates. The insurance firms that were chosen for this investigation are displayed in the following table.

A catalog of the businesses that participated in the current research

Table - 1: Insurance Companies in India

S. No.	Insurance company	Date of Incorporation
1	Life Insurance Corporation of India	01 September 1956
2	HDFC standard life insurance	23 October 2000
3	Max New York life insurance	15 November 2000
4	ICICI prudential life insurance	24 November 2000
5	OM Kotak life insurance	10 January 2001
6	Birla Sun life insurance	31 January 2001
7	Tata AIG life insurance	12 February 2001
8	SBI life insurance	29 March 2001
9	ING Vysya life insurance	02 August 2001
10	Allianz Bajaj life insurance	03 August 2001
11	Met Life India insurance	06 August 2001
12	Reliance Life insurance	03 January 2002

(Source: Secondary data)

Analysis Structure Analysis Using Multiple Regressions:

In multiple regression, one variable is used to predict another variable using a set of additional factors. A specific formula was employed:

$$Y = a + B_1 X_1 + B_2 X_2 + \dots + B_n X_n$$

To avoid multicollinearity, fewer associated factors were selected while increasing the number of independent variables. We evaluated the F ratio and P value for the model to evaluate their significance. If the calculated P value was less than the essential threshold of $\alpha = 0.05$, the model was deemed statistically significant. To evaluate the model's ability to explain the data, the coefficient of determination (R^2) was calculated. When all independent variables are considered, R^2 will rise; but, if the additional variable fails to explain any of the observed variation, R^2 will fall.

The adjusted R^2 calculated by Adjusted was

$$R^2 = 1 - (1 - R^2) \frac{(N-1)}{(N-K)}$$

N = Number of Sample Observations K = Number of parameters

Findings and Analysis:

Adding extra independent factors is unnecessary for enhancing prediction accuracy when the adjusted R^2 closely approximates R^2 . However, it becomes essential to include additional variables when there is a significant discrepancy between the two values. Next, we generated all the potential permutations of the independent variables that were chosen in order to calculate the best subset regression. For this reason, we settled on the two-variable model with the highest R^2 value.

Annual Growth Rate (CAGR):

The variable's compound annual growth rate is calculated on a yearly basis. To calculate the growth rate, use the following formula.

The formula is utilized in cases where the variable exhibits a continuous growth:

(Last value / First value)^{1/n-1} Where n = Number of years

In cases where the variable's growth is not constant, the formula is:

$$N \sqrt[(1+r_1)(1+r_2)\dots(1+r_n)-1]{R \text{ growth rate}}$$

R growth rate

The growth rate of variables may be determined using all of the ratios.

Table - 2: Multiple Regressions

S. No.	Company's	R^2	Adj R^2	't'	Significant
1	LIC	.980	.907	.185	.218
2	BIRLA	1.001	.989	5.131	.001
3	ICICI	.836	.257	-1.879	.453
4	ING	1.001	.987	-4.365	.031
5	HDFC	.989	.978	-.918	.068

6	MAX NEW	.913	.645	1.103	.223
7	RELIANCE	.987	.981	2.718	.001
8	TATAAIG	1.001	.989	-5.526	.016
9	MET LIFE	.951	.816	1.819	.119
10	SBI LIFE	1.001	1.001	4.865	.008
11	BAJAJ ALLIANCE	1.001	1.001	.575	.000
12	KOTAK	.968	.803	-1.806	.306

(Source: Secondary data)

Hypothesis:

Profitability, number of agencies, number of policies, operating expenses, commission expenses, number of companies, claims paid, operating expenses, and gross premium are the aforementioned influencing factors. The results in the table above prove without a reasonable doubt that the null hypothesis is correct.

There is a multiple regression study of the factors that affect profits in Table 2. Almost all of the variation in its earnings can be explained by the LIC model. There is no need to add additional variables because the corrected R² is closer to R². Calculated P values of .219 exceeded the 0.05 threshold of significance. Near the 0.05 level, the agencies are (0.18).

All of the fluctuations in its earnings may be explained by the BIRLA. There is no need to add additional variables because the corrected R² is closer to R². At the 0.04 level, the calculated P values (.001) were lower than the important level. There is a 0.05 threshold of significance for the firms (0.009).

Of the changes in its net profit, 83% were reported by the ICICI. Adjusted R² is still far from R². At the 0.05 level, the calculated P values (.463) were more than the critical threshold. A result that is closer to the 0.05 level is the company's (.19).

When it comes to earnings, ING has full control. There is no need to add additional variables because the corrected R² is closer to R². Calculated P values of 0.031 exceeded the 0.05 threshold of significance. Assumptions are more in line with the 0.05 threshold (0.10).

The HDFC retains full ownership of all profit fluctuations. There is no need to add additional variables because the corrected R² is closer to R². The calculated P-values (.067) were more than the 0.05 level of significance. Running costs are approaching the 0.05 threshold (0.12).

The MAX NEW is responsible for 92% of the profit fluctuation. Adjusted R² is still far from R².

At the 0.05 level, the calculated P values were more than the critical value of .243. In comparison to the other variables, fixed assets are closer to the 0.05 level with a value of 0.32.

Its RELIANCE accounts for nearly all of the variance in its earnings. There is no need to add additional variables because the corrected R² is extremely close to R². When the claims and operational expenditures were both significant at the 0.05 level, the computed P values of .001 were lower than the critical value.

All of the changes in TATA AIG's earnings were documented by the company. Much closer to R² is the corrected R². Because of this, it is clear that more variables are unnecessary. At the 0.05 level, the calculated P values were more than the critical threshold (.017). Nearer to the 0.05 threshold are the assertions (.084).

A whopping 96% of the earnings fluctuations may be explained by the MetLife, Inc. Adjusted R² is still far from R². The calculated P-values, when all variables are set above the 0.05 level, were .128 greater than the critical value.

The SBI LIFE retained full ownership of any profit fluctuations. A corrected R² equals a standard R². Because of this, it is clear that more variables are unnecessary. There was a significant difference between the critical value at the 0.05 level and the calculated P values of .009. Closer to the 0.05 threshold are the commission expenses (0.036).

The BAJAJ ALLIANCE owns all of the equity in the company. A corrected R² equals a standard R². The calculated P-values of .000 were lower than the 0.05 level of significance, indicating that the policies (0.005) are statistically significant.

The KOTAK explains 97% of the profit fluctuation. Adjusted R² is still far from R². At the 0.05 level of significance, the calculated P values were more than the critical value (.316). When all variables are greater than the 0.05 threshold, this model is not statistically significant.

Table – 3: Annual Growth Rate

Year	LIC	Birla	ICICI	ING	HDFC	Max New	Reliance	Tata AIG	MET Life	SHI Life	BAJAJ Alliance	Kotak
2014-15	0.05	52.63	107.14	300.00	350.00	53.33	105.88	116.67	166.67	100.00	94.12	211.11
2015-16	0.23	41.38	137.93	62.50	44.44	43.48	37.14	100.00	100.00	90.00	48.48	39.29
2016-17	0.05	29.27	57.97	46.15	246.15	93.94	66.67	53.85	118.75	63.16	212.24	10.26

2017-18	1.05	83.02	60.55	78.95	66.67	31.25	96.25	80.00	22.86	48.39	270.59	6.98
2018-19	3.65	52.58	233.14	169.12	198.67	40.48	1.27	23.61	23.26	200.00	54.67	63.04
2019-20	9.60	263.51	235.85	44.81	27.01	64.41	368.55	217.98	77.36	44.93	14.82	101.33
2020-21	20.14	22.68	7.35	0.00	7.03	263.40	53.69	60.42	102.13	144.50	15.59	31.13
2021-22	7.26	-1.21	-8.61	-4.15	-6.73	0.00	8.91	-3.30	34.21	1.02	-1.12	8.59
2022-23	3.72	-5.37	-27.02	-2.76	-12.32	-28.51	0.08	-17.31	5.88	27.33	-5.13	-5.58

(Primary Data)

Based on the number of enterprises in Life Insurance Company, the annual rate of growth reaches a maximum of 20.14 in 2020-21 and a minimum of 0.05 in 2014-15 and 2016-17. The number of LIC-affiliated businesses increased by an average of 9.60 percent in 2019-20. With a peak of 263.51 in 2019-20 and a low of 5.37 in 2022-23, the number of firms in BIRLA had a remarkable increase. In 2017-18, the typical pace of expansion was 83.02.

The years 2019-20 and 2022-23 saw the most and lowest negative growth for ICICI, at 235.85 and 27.02 percent, respectively. The best growth rate for ING was 300.00 in 2014-15, while the worst negative growth rate was 2.76 in 2022-23.

The most impressive rise for HDFC occurred in 2014-15, when the value reached 350.00. In 2022-2023, the number reached a negative growth of 12.32, marking the lowest growth recorded to that point. With a record-breaking 263.40 in 2020-21, MAX NEW maintained a steady annual growth rate. In 2022-2023, when the value reached 28.51, the negative increase was reported.

In 2019-20, TATA AIG's growth was at its highest, while in 2022-23, it was at its lowest (17.31). There has been a highest growth in MET LIFE's in 2014-15 which was 116.67. In 2022-2023, the growth rate was 5.88 percent, the lowest ever recorded.

SBI LIFE's growth rate peaked in 2018-19 at 200 percent and bottomed out in 2021-22 at 1.2 percent. The worst growth rate for KOTAK was 5.58 in 2022-2023, while the best growth rate was 211.11 in 2014-15.

Between 2014-15 and 2022-23, RELIANCE's growth slowed from 105.88 percent to 0.08 percent. In 2019-20, the greatest increase was noted (368.55). In 2022-23, BAJAJ ALLIANCE's growth rate was a negative 5.13, down from a peak of 270.59 in 2017-18.

Findings:

The insurance firms BIRLA, RELIANCE, and BAJAJ ALLIANZE were determined to be statistically significant at the 0.05 level by the application of Multiple Regression Analysis. All factors are more than the 0.05 threshold according to MET LIFE and KODAK, although other firms included in the analysis are closer to the significant level.

The research shows that SBI LIFE has the highest growth rate at 27.33 percent, while MET LIFE comes in second at 5.88 percent. With a negative growth rate of 28.51 percent, MAX NEW insurance business is first, followed by ICICI at 26.01 percent.

Suggestions:

- The LIC must innovate its business procedures, human resources plan, channel management, and operational models to rein in operational costs and combined ratios if it wants to compete with private enterprises.
- The presence of private life insurers in the market makes it inevitable that they will capture a share of the new business. Now is the time for LIC to hold on to its consumers.
- Insurance firms need to create a plethora of new products, such as pension plans and special group policies, to meet the demands of their customers and speed up their growth rate.
- If it wants to grow, the insurance firm has to target rural regions.
- To make insurance more relevant and inexpensive, businesses should undertake more market research before releasing products that cater to certain demographics.

Conclusion:

Even before India's nationalization, there were life insurance firms. Following India's nationalization, the constitution established the Life Insurance Corporation of India. Insurance firms in India have been reaching new heights of international expansion thanks to liberalization, privatization, and globalization policies. Meanwhile, a plethora of international insurers have also made inroads into the Indian insurance sector. According to the current situation, private enterprises' insurance industry has grown at a faster rate than the

government sector's. Their fierce rivalry is good for consumers since it drives down prices.

References:

1. Ade Ibiwoye (2010), "Evaluating Financial Services Productivity: A comparison of Ratios, Index numbers and Frontier Methods" *Journal of Economics and Engineering* ISSN:2078- 0346.
2. Anoop Rai (1996), "Cost Efficiency of International Insurance Firms" *Journal of Financial Services Research*, Vol. 10 pp. 213- 233.
3. Cummins and Giusepp and Weiss (1996), "Productivity and Technical Efficiency in Italian Insurance Industry", The Wharton School, University of Pennsylvania, Working Paper Series -10, Presented at Georgia Productivity Seminar, pp. 1-41.
4. Cummins and Weiss (1998), "Analyzing Firm Performance in the Insurance Industry Using Frontier Efficiency Methods", The Wharton School, University of Pennsylvania, pp. 1-45.
5. David Cummins J and Mary A. Weis (2010), "Systemic Risk and the Financial System" *Federal Reserve Bank of New York Economic Policy Review* 13, pp. 65-80.
6. Garg M.C. and Deepti (2008), "Efficiency of General Insurance Industry in India in the Post-Liberalization Era: A Data Envelopment Approach", *The ICFAI Journal of Risk and Insurance*, Vol. V, No. 1, pp. 32-49.
7. Gupta, S.P. (1987), "Methods of Statistics", Sultan and Sons Publisher, New Delhi.
8. Hifza Malik (2011), "Determinants of Insurance Companies Profitability: An Analysis of Insurance Sector of Pakistan", *Academic Research International*, Vol. 1, Issue 3, pp.315- 322.
9. Hsiao & Su, 2006, "An Evaluation of Investment Performance and Financial Standing of Life insurers in Taiwan", *The Journal of American Academy of Business*, Vol.10
10. Jeng & Lai (2005), "Ownership structure, agency costs, specialization and efficiency: An analysis of Keiretsu and Independent insurers in the Japanese non-life insurance industry" *Journal of Risk and Insurance*, Vol. 72 (1), pp.105- 158.
11. Kaman & Turgutlu (2009), "Cost Efficiency and Scale Economies in the Turkish Insurance Industry", *Applied Economics*, Vol.41, pp 3151-3159.
12. Karim, Mohd. Zaini Abd Jhantasana, Chanta (2005), "Cost Efficiency and Profitability in Thailand's Life Insurance Industry: A Stochastic Cost Frontier approach", *International Journal of Applied Econometrics and Quantitative Studies*. Vol.2, pp.19-36.
13. Mariappan R (2011), "Growth and Productivity of the Unorganized Manufacturing, Sector in India" *The Indian Journal of Industrial Relations*, Vol.47, No.1, pp.20-35.
14. Marietta Janowicz-Lomot (2011) "Investment activity of non-life insurance companies in Poland" *MIBES 2011 – Poste*, pp.467-478.
15. Nitin Tanted (2006) "Insurance and risk management" Back to article pp.1-41.
16. Norma Md Saad, Nur Edzalina Haji Idris (2011), "Efficiency of Life Insurance Companies in Malaysia and Brunei: A Comparative Analysis" *International Journal of Humanities and Social Science*, Vol. 1 No. 3, PP. 111-122.
17. Ozlem Ozdemi and Aysegul Balkanl (2011), "Liquidity Structure of Turkish Insurance Industry: Ratio Analysis" *International Research Journal of Finance and Economics* ISSN 1450-2887 Issue 71 PP.160-175.
18. Ramanadh Kasturi (2006), "Performance management in Insurance Corporation Journal of Business Administration Online Vol. 5 No.1
19. Rao C. R. (1975), "Liner Statistical Inference and its Applications", Kliles Eastern Private Ltd, New Delhi.