# The Expansion of Insurance Sector: A Critical Study of Life Insurance in India

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#### **Abstract**

The aim of this study is examining the relationship between commission expenses, the number of offices, and new policies issued with the premium amount charged. Quantitative research was used. The research was descriptive and analytical. Secondary tools provided the data. The 2015–2022 research lasted seven years. Rates, average, CAGR%, coefficient of variation, standard deviation, correlation, regression analysis, ANOVA, and graphical representations have been used to study Indian Life Insurance Market trends and patterns. MS Excel and statistical software analyzed the data collected. The correlation analysis found a 0.995 connection between premium charges and commission charges. Because the regression analysis and ANOVA table significance values were below 0.05, the alternative hypothesis was accepted and the null hypothesis was rejected. This suggests that life insurance premiums are affected by the number of new policies, locations, and compensation expenditures. The analysis found a positive correlation between total premiums, commission charges, new policies, and offices.

**Keywords:** IRDA, Life Insurance Sector, Performance and Trends, LIC, Private insurance companies, Expansion of the Insurance sector.

### 1. Introduction

"Healthy citizens are the greatest asset any country can have." — Winston Churchill Since the last few years, the Indian economy has changed as a result of the significant economic reforms that touch practically every industry. Back in the 13th century the traders from Europe needed to hedge their theft risk when travelling to sell their goods across the globe, is where insurance originated (Satuluri 2019)<sup>13</sup>. In India, the origin of insurance dates back to our Vedic times. The modern life insurance industry in India began with the foundation of Oriental Life Insurance Corporation in Kolkata by Anita Bhavsar in 1818 and failed in 1829 (Dhar 2018)<sup>3</sup>. Bombay Life Insurance Company and Triton Insurance Company for General Insurance were founded in 1823 and 1850, respectively. There were many insurance companies before 1912 but no guidelines or norms related to life insurance. All the insurance companies were operated by private organizations and as such no regulatory environment or norms were there to control and manage the business. In 1912 the first law to control the life insurance industry, the Indian Life Assurance Companies Act was passed (Sengupta et al. 2005)<sup>15</sup>.

Prior to liberalization, the Life Insurance Corporation of India (LIC) held a monopoly in the insurance sector. In 2000, the Indian government permitted private insurers with a 26% foreign direct investment (FDI) out of the total portion of the investment. India has 57 insurance companies, 24 of which are engaged in life insurance companies, and 34 non-life insurers/general insurance companies (**Gupta 2022**)<sup>9</sup>. The IRDA bill, which was formerly known as the IRA bill, was approved by the Cabinet in 1999 and received presidential assent in 2000.

India is the third- largest rapidly growing economic country in the world. One of the crucial financial services that can spur economic growth is insurance. Guidelines to ensure that the insurance funds are kept in highly secure government bonds or in such businesses which are known to safe-keep the policyholder's interest is provided in the Insurance Act. This is accomplished by allocating long-term investments to useful purposes and serving as a backup plan against the

dangers associated with any endeavor involving productivity, assets, or life (**Ghosh 2013**)<sup>8</sup>. Health insurance management is more challenging because of problems like moral hazards, poor selection of policy, misleading information, etc. If not managed properly, this could adversely impact the insurance sector and the policyholders. (**Hebbar et al. 2014**)<sup>10</sup>. It was suggested that awareness should be created by companies regarding life insurance premiums, offices and costs related to taking life insurance policies. A number of variables are to blame for the expansion of the insurance industry related to finances, culture, religion, product quality, interpersonal relationships, and customer service (**Gebreal 2016**)<sup>7</sup>.

#### 1.2 Overview of the Insurance Sector in India

In 1912, the first law to control the life insurance industry, the Indian Life Assurance Companies Act was passed. The insurance industry has an impact on economic development. Each nation is better able to take risks because it has a robust insurance industry that contributes steady funding for infrastructure growth. Not only is India the fifth largest life insurance market in the world, but it is also the second most populous country in the entire world at present. (Gawali 2019)<sup>6</sup>. According to the National Statistics Office's (NSO) provisional estimates of national income, India's Gross Domestic Product (GDP) is projected to reach 236.65 lakh crore at current prices in 2021–2022, up from 198.01 lakh crore in 2020–2021, representing a growth rate of 19.5%.

In the year 1993 a committee with R.N Malhotra as chairman was formed and reports were submitted in 1994. Its major recommendations included: the president should reduce its ownership in the insurance sector below 50%; private and foreign companies should be allowed in the insurance sector so insurance had a competitive environment, affordable for everyone. The Cabinet passed the Insurance Regulatory and Development Authority (IRDA) law, formerly the IRA bill, in 1999, and the president signed it in 2000. (Bajpai & Mazhar 2019)<sup>12</sup>.

Private insurers reported 17.36% premium growth in 2021–2022, while the LIC reported 6.13 %. The LIC's market share fell 2.34% to 61.80% in 2021–2022, while private insurers' rose to 38.20%. The life insurance sector earned Rs. 6.93 lakh crore in 2021-22, up 10.16% from Rs. 6.29 lakh crore the year before. (**IRDA Annual Report 2021-22**) \*.

### 1.3 Overview of the Insurance Sector in India

1818	Oriental Life Insurance was founded and located in Kolkata
1870	The British Insurance Act was passed.
1912	As the first law to control the life insurance industry, the Indian Life Assurance Companies Act was
1912	passed.
1938	The Insurance Act, 1938 passed
1956	LIC was formed by an Act of Parliament, viz. LIC Act, 1956 after the Central Government took over
1930	245 Indian and foreign insurers and provident societies
1997	With regard to board restructuring and investment freedom, the government has provided more
1997	freedom to LIC, GIC and its subsidiaries.
1998	The government resolves to permit 40% foreign ownership in private insurance firms, of which 26%
1996	would go to foreign corporations and 14% will go to NRIs, OCBs, and FIIs.
1999	The Insurance Regulatory and Development Authority (IRDA) bill, which was formerly known as
1999	the IRA bill, was approved by the Cabinet in 1999 and received presidential assent in 2000.
2014	The government increased the FDI cap from 26% to 49%.
	As per the union budget 2018-19, the Govt of India introduced three schemes;
2018	1. Pradhan Mantri Jeevan Jyoti Bima Yojana, 2. Pradhan Mantri Suraksha Bima Yojana, 3.
	Ayushman Bharat Yojana.
2019	National Health Protection Scheme got implemented & started to work.
2021	Insurance (Amendment) Bill,2021 passed amending FDI limit to 74%

Source: Various reports, articles, newspapers and Insurance companies.

### 1.4 Insurance Industry

• **Life Insurance:** It is directly related to a person's life and is the source of income for those people who are dependent on that person's earnings. By securing a life insurance policy or cover, an individual can ensure the posthumous financial stability of their dependents.

• General Insurance: It provides protection from dangers that would endanger a person's health or his or her physical assets, including a home, car, motor and fire among other things. In general insurance, the premium amount is based on the nature of risk that a particular event and related to loss/damage its thing therefore general insurance can be categorised into four (health, motor, fire and marine insurance). If an unpredictable event occurs, the insurance amount accrued will be paid back.

#### 1.5 OBJECTIVES OF THE STUDY

- Life insurance is important in any economy, but India, the second most populous country after China, is especially important. Furthermore, majority of its population is young. Thus, this study's Objectives:
- To study the expansion of the insurance market in India from the year 2015 to 2022.
- To understand the trends and performance of the Indian life insurance market.
- To investigate the relationship between the amount of commission expenses and the total amount of premium charged.
- To investigate the relationship between the amount of total amount of premium charged and new life insurance policy issued, number of life insurance offices and commission expenses.

#### 2. Literature Review

**Sharma & Singh Chowhan** (2012)<sup>16</sup>: The paper will examine the private sector's life insurance development and the sector's potential problems and competitiveness in India. Information must come from primary and secondary sources. The researcher will employ stratified random sampling to select 50 Jaipur samples for the study. Private life insurers outperformed LICs in solvency. Private insurers have a higher current ratio than LICs. LIC handled death claims better than private life insurance. Secondary data suggests liberalization boosts Indian life insurance companies.

**Kumara** (2013)<sup>11</sup>: India's life insurance market has flourished significantly since privatization. However, a sizable section of Indians do not yet have access to health care. This study examines the financial performance of the insurance industry in the public and private sectors, as well as its market share and development following the period of liberalization. The insurance industry premium income rose from Rs.500 94.46 crore in 2001-2002 to Rs.265450.37 in 2009-2010. The research methodology employed is descriptive analysis. After private insurers entered, life insurance premiums increased significantly. The claim is that Liberalization improves Indian life insurance company growth, according to secondary data research.

- 3. Gairola (2016)<sup>5</sup>: According to their research, our nation's huge size and unexplored insurance market will promote insurance business growth in the next years. LIC's market share dropped from 99.46% in 2001-2002 to 69.77% in 2010-2011. The market share's private sector company climbed from 2011–12 to 2013–14, and then slightly dropped from 2014–15 to 2016–17. It demonstrates the efforts private insurers make to advance each year. From 2011–12 to 2014–15, private insurers market somewhat dropped; however, in 2015–16, it slightly increased. Market share held by private insurers rapidly expanded from 0.56% in 2001-2002 to 30.23% in 2010-2011.
- 4. **Dhar** (2018)<sup>4</sup>: The Indian insurance sector is not competitive with the global insurance sector because India is a developing country so there is a huge population of low-level income people who cannot afford the premium amount. The Insurance Regulatory and Development Authority of India (IRDA) contributed significantly for expanding the Indian insurance market. This paper represents that India's insurance industry has increased by over 27.00% annually. In this research, for the study of relationship between variables T-test and ANOVA test was conducted. There was a significant relationship between the CAGR of LIC and private companies during the study period because the significant value is less than 0.05 representing the alternative hypothesis will be accepted and the null hypothesis rejected.
- 5. (**D**, 2020)<sup>2</sup>: It aimed to determine what factors influence consumer life insurance investment. Insurance and economic growth benefit each other. The largest Indian insurance firm is LIC. LIC controls almost 70% of the market. Most Indians reside in rural areas and are unfamiliar with modern technology to access information, therefore they lack information about new insurance policies. Whatever information they get is from the agent. When choosing an insurance policy, many customers rely on the guidance of their agents. Between 2004 and 2011, the policyholders lost about \$28 billion due to lapsed insurance policies.
- 6. **Srivastava** (2020)<sup>18</sup>: The primary factor influencing a consumer's decision to invest money in an insurance policy is their income. The insurance companies maintain their interest, know where to invest, and are capable of making decisions.

The IRDA maintains the interests of consumers in mind when evaluating investment requirements. The residents of Gorakhpur are mostly concerned with current consumption and are not particularly aware of life insurance. A person's capacity for risk set-offs varies with their level of education. The IRDA's promotion of ethical behavior among insurance players is supported by 70% of respondents, while only 18% disagree.

- 7. **Singh, & Ali** (2020)<sup>17</sup>: It was found that insurance companies are facing many challenges like scarcity of skilled and qualified workers, absence of adequately trained team members, shift in public opinion regarding insurance, creation of new distribution channels, maintenance of high returns on investments, establishment of strict underwriting standards, management of high cost. In this observed that LIC offices have grown from 2301 in 2007 to 4892 in 2016, whereas private sector offices have grown from just 3072 in 2007 to 6179 in 2016. The enormous increase in LIC's first-year premium from Rs.9700.98 crore in 2000-01 to Rs.134671.7 crore in 2017-18 and the enormous increase in private firms' first-year premium increase Rs.6.45 crore in 2000-01 to Rs.59482.21 crore in 2017-18.
- 8. **Rai**, (2022)<sup>14</sup>: In this research paper, the researchers obtained answers from 52 respondents on factors such as offering a satisfactory policy plan, achieving a high rate of return-on-investment, customers' likes and dislikes of public versus private insurance plans, and preference of public vs private insurance company. 52 respondents were selected from Nagpur city. As per this study, Nagpur city respondents were happier with public sector life insurance companies than private sector life insurance companies, whereas the LIC was the dominant company in the life insurance sector in Nagpur city.
- 9. **Kacha, B.** (2022)<sup>1:</sup> In their paper, factors affecting customer retention in life insurance sector were studied. A questionnaire was sent to 158 policyholders of life insurance policy. The researcher conducted an ANOVA test taking the significance level at 5%. However, the results showed that the significance level was 0.000, which is less than 0.05 and acceptable, and that this indicates a significant influence of independent factors on customer retention.
- 10. **Deka** (2023)<sup>3</sup>: The title of this paper is "Growth and performance of public and private life insurance companies: an evaluative study," and the purpose of this paper is to evaluate both the Life Insurance Corporation of India and three private companies (SBI Life, Kotak Mahindra and TATA (AIA) to determine their respective strengths and shortcomings. LICI has many strengths, like the highest amount of Premium Collection, number of active policies, largest agent network, and efficient individual agents. Private companies have forces like the highest market share, rapid growth in business, strong lapsed policy management, and capturing market share. LICI has numerous vulnerabilities, including a lapsed policy that is ineffective, inefficient administration, and a declining market share. Fewer premiums collected, fewer active policies, a small agent network, and inefficient agents are just a few of the many weaknesses of private companies.

#### 3. Research Methodology

- **Research Design:** In this research, a quantitative research methodology has been used. This study was conducted using both descriptive and analytical research designs.
- Sources of Data: Secondary data has been taken for the study. The data has been collected from IRDA's annual reports, journals, articles, research papers, LIC reports and websites.
- **Period of the study**: A period of seven years between 2015 to 2022 has been taken in the study.
- Tools and techniques used for analysis: Analysis by use of percentages, averages, CAGR %, coefficient of variation, standard deviation, correlation, regression analysis, one-factor ANOVA and graphical representation have been done to understand the trends and patterns of the Indian Life Insurance Market. MS Excel and statistical software have been used for analysis after data collection. For hypothesis testing, correlation, regression and ANOVA test has been used to determine whether there is a significant difference between total premium charged and commission costs, new life insurance policy issued, and number of offices.

#### 4. Hypotheses

**H01:** There is no significant relationship between the total amount of premium and total commission expenses.

H11: There is a significant relationship between the total amount of premium and total commission expenses.

**H02:** There is no significant relationship between the total amount of life insurance premium and new life insurance policies issued, commission expenses and the number of life insurance offices.

**H12:** There is a significant relationship between the total amount of life insurance premium and new life insurance policies issued, commission expenses and the number of life insurance offices.

### 5. Data Analysis and Interpretation

According to the objectives, the analysis has been broken up into three sections, which are as follows:

#### 5.1Part 1

The expansion of the insurance market in India for the selected time period is studied in the first part of the analysis.

In accordance with the objectives of the study, the expansion of the Indian insurance industry has been measured. Insurance penetration and insurance density are good indicators of the economic growth of the insurance sector of any country in the world and these indicators are based on the country's population, premium amount, gross domestic product and GDP. Insurance density is described as the proportion of premium to population at a time period, whereas, insurance penetration is described as the proportion of insurance premium to GDP in a time period.

**Table 1:** The penetration of life insurance in the year 2015-16 was 2.72% and in the year 2021-22 was 3.2%; the penetration of non-life insurance in the year 2015-16 was 0.27% and in the year 2021-22 was 1%; and overall industry had 3.44% in the year 2015-16 while 4.22% in 2021-22. The average penetration of seven years of life insurance was 2.88 and non-life insurance was 0.904286.

The life insurance density in 2015-16 was \$43.2 and \$69 in 2021-22; non-life insurance was \$11.5 and \$22; and overall industry was \$54.7 and \$91 in 2021-22. The average density for seven years of the life insurance was \$54.95714 and the non-life insurance was \$17.38571.

The standard deviation of penetration of life and non-life insurance was 0.221209% and 0.112969 and of overall penetration of insurance industry was 0.307501%. The standard deviation of the density of life and non-life insurance was 8.499776 and 3.688915 and of overall density of insurance industry was 12.15054.

Life Insurance **Non-Life Insurance Industry (Total)** Year **Penetration Density Penetration Density Density Penetration** (USD) (%)(USD) (USD) (%)(%)2015-16 2.72 43.2 0.72 54.7 3.44 11.5 2016-17 2.72 46.5 0.77 13.2 59.7 3.49 2017-18 2.76 55 0.93 18 73 3.69 2018-19 2.74 54 0.97 19 74 3.7 2019-20 2.82 58 0.94 19 78 3.76 2020-21 3.2 59 1 19 78 4.2 2021-22 3.2 1 22 91 4.2 69 Average 2.88 54.95714 0.904286 17.38571 72.62857 3.782857 0.221209 8.499776 0.112969 3.688915 12.15054 0.307501 SD

Table 1: Insurance Penetration and Density in India

Sources: IRDA Annual Report

### 5.2 Part 2

To evaluate the performance and trends of the Indian insurance sector in alignment with the study's objective, various financial metrics were employed in this section.

**Table 2 and Figures 1 & 2** depict The total premium amount for life insurance witnessed a notable increase from Rs. 3,66,943.23 crores in 2015-16 to Rs. 6,92,614.14 crores in 2021-22, with a Compound Annual Growth Rate (CAGR) of 11.17%. Public life insurance companies accounted for Rs. 3,47,622.994 crores of this amount, surpassing the contribution of private life insurance companies, which stood at Rs. 1,73,322.25 crores. Over the years, the dominance of LIC in the life insurance sector has diminished since the entry of private companies. LIC's premium amount rose from Rs. 2,66,444.21 crores to Rs. 4,28,024.97 crores during the same period, while private insurers saw an increase from Rs. 1,00,499.02 crores to Rs. 2,64,589.17 crores. Notably, the CAGR of private life insurance companies (17.51%) significantly outpaces that of public ones (8.22%). Studies suggest that private insurers often provide better services, leading to increased interest among

<sup>\*</sup>Insurance Penetration = Ratio of Premium (USD \$) to GDP (USD \$).

<sup>\*</sup>Insurance Density = Ratio of Premium (USD \$) to Total Population.

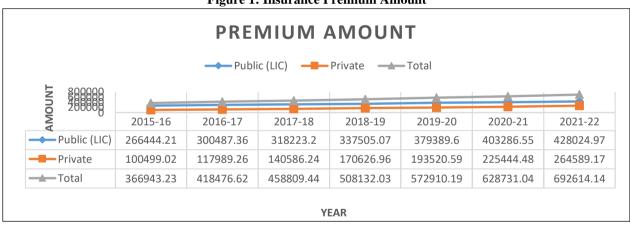
consumers in purchasing policies from them. In 2021-22, the life insurance sector incurred gross management expenses of Rs. 1.07 lakh crore, accounting for 15.50% of the total gross premium.

**Table 2: Total Amount of Life Insurance Premium** 

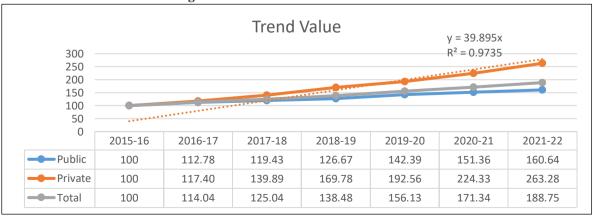
	Public (LIC)			Private			Total		
Year	Premium Amount	Grow th (%)	Trend Value	Premium Amount	Grow th (%)	Trend value	Premium Amount	Grow th (%)	Trend value
2015-16	266444.21	-	100	100499.02	-	100	366943.23	-	100
2016-17	300487.36	11.33	112.78	117989.26	14.82	117.40	418476.62	12.31	114.04
2017-18	318223.2	5.57	119.43	140586.24	16.07	139.89	458809.44	8.79	125.04
2018-19	337505.07	5.71	126.67	170626.96	17.61	169.78	508132.03	9.71	138.48
2019-20	379389.6	11.04	142.39	193520.59	11.83	192.56	572910.19	11.31	156.13
2020-21	403286.55	5.93	151.36	225444.48	14.16	224.33	628731.04	8.88	171.34
2021-22	428024.97	5.78	160.64	264589.17	14.79	263.28	692614.14	9.22	188.75
Mean	347622.99	-	-	173322.25		-	520945.24	-	-
SD	58238.747	-	-	59017.263	-	-	116925.774	-	-
CV	16.7534219	-	-	34.050599	-	-	22.4449259	-	-
CAGR (%)	8.22%	-	-	17.51%	-	-	11.17%	-	-

Source: IRDA Annual Reports

**Figure 1: Insurance Premium Amount** 



**Figure 2: Trend Line of Premium Amount** 



**Table 3 and Figure 3** depict the market share of life insurance companies based on the total premium amount. Since 2000, the insurance industry has been open to private companies.

Data indicates that the market share of private life insurance companies saw an increase from 27.39% in 2015-16 to 38.2% in 2021-22, while during the same period, the market share of public life companies, particularly LIC, declined from 72.61% to 61.8%. Over the study period spanning from 2015 to 2022, it was observed that private life insurance companies outperformed public ones in aspects such as service quality, advertising, after-sales support, conducive environments, enhanced facilities, and the introduction of tailored policies for policyholders. The current market landscape reflects intense competition, where customers wield significant influence, opting for companies that offer superior service quality

Market Share of Life Insurance Companies (in Percentage) Year Public (LIC) **Private** 2015-16 27.39 72.61 2016-17 71.81 28.19 2017-18 69.36 30.64 2018-19 66.42 33.58 2019-20 66.22 33.78 2020-21 64.14 35.86 2021-22 61.8 38.2

**Table 3: Market Share of Life Insurance Companies** 

Source: IRDA Annual Reports

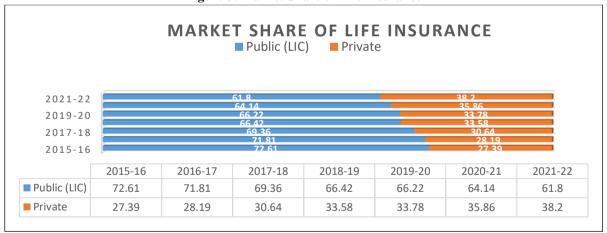


Figure 3: Market Share of Life Insurance

## 5.3 Part 3

According to the objectives of the study, the relationship between variables like insurance premium charged, commission expenses, number of offices, and number of new policies issued has been evaluated.

**Table 4 and Figure 4** depict the commission expenses of public and private life insurance companies. IRDAI has prescribed maximum permissible management expenses based on the management expenses of insurers operating a life insurance company, taking into account factors including the type and nature of the products, time of premium payment and period of insurance business as per IRDAI Regulations, 2016.

Commission expenses within the life insurance sector have seen a significant uptick. From 2015-16 to 2021-22, these expenses rose from Rs. 20,266.69 crores to Rs. 35,887.31 crores, marking a Compound Annual Growth Rate (CAGR) of

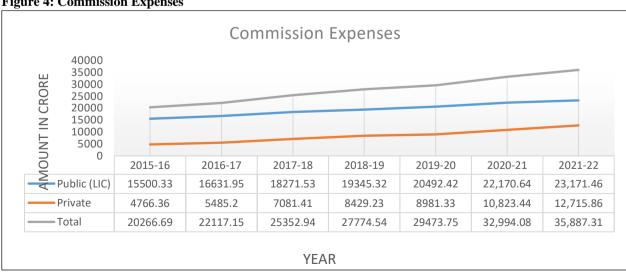
9.99%. Notably, the average commission expenses for public life insurance companies stood higher at Rs. 19.369.09 crores compared to Rs. 8,326.11 crores for private life insurance companies. Private life insurers' commission expenses surged from Rs. 4,766.36 crores to Rs. 12,715.86 crores during this period, while LIC's commission expenses increased from Rs. 15,500.33 crores to Rs. 23,171.46 crores. The average commission expense of public life insurance companies (Rs. 19,369.09 crores) is higher than the average of private life insurance companies (Rs. 8,326.11 crores), and similarly, the CAGR of private life insurance companies (17.77%) was more than the CAGR of public life insurance companies (6.93%). The total growth of commission expenses was minimum (5.77%) in 2019-20 and maximum (12.76%) in 2017-18. The standard deviations of commission expenses of public life insurance companies and private life insurance companies are 2805.73 and 2835.44 respectively. There isn't much difference in the standard deviations of public and private life insurance companies.

**Table 4: Commission Expenses** 

	Public (LIC)		Private		Total	
Year	Commission Expenses (in crores)	Growth (%)	Commission Expenses (in crores)	Growth (%)	Commission Expenses (in crores)	Growth (%)
2015-16	15500.33		4766.36		20266.69	
2016-17	16631.95	6.80%	5485.2	13.11%	22117.15	8.37%
2017-18	18271.53	8.97%	7081.41	22.54%	25352.94	12.76%
2018-19	19345.32	5.55%	8429.23	15.99%	27774.54	8.72%
2019-20	20492.42	5.60%	8981.33	6.15%	29473.75	5.77%
2020-21	22,170.64	7.57%	10,823.44	17.02%	32,994.08	10.67%
2021-22	23,171.46	4.32%	12,715.86	14.88%	35,887.31	8.06%
Mean	19369.09286		8326.118571		27695.20857	
SD	2805.738542		2835.441675		5629.415526	
CV	14.48564764		34.05478376		20.32631569	
CAGR (%)	6.39%		17.77%		9.99%	

Source: IRDA Annual Reports

**Figure 4: Commission Expenses** 



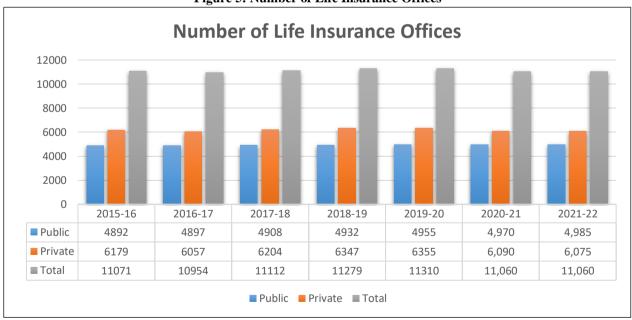
**Table 5 and Figure 5** According to the IRDA report, as of March 31, 2022, 60% of life insurance offices were situated in Tier I cities with populations of one lakh or more. Together, LIC and private insurers covered 92% of all districts in the country. The total number of offices remained constant at 11,060 from March 31, 2021, to March 31, 2022. Public company offices increased from 4,892 in 2015-16 to 4,985 in 2021-22, while private company offices decreased from 6,179 to 6,075 during the same period. The overall number of offices declined from 11,071 in 2015-16 to 11,060 in 2021-22. In today's technologically advanced era, insurance-related tasks are predominantly conducted online, eliminating the need for physical office visits. The table illustrates the evolution of life insurance company office numbers, with no growth observed from 2020-21 to 2021-22.

Table 5: Number of Life Insurance Offices

Number o	Number of Life insurance offices								
Year	Public	Private	Total	Growth					
2015-16	4,892	6,179	11,071						
2016-17	4,897	6,057	10,954	-1.07%					
2017-18	4,908	6,204	11,112	1.42%					
2018-19	4,932	6,347	11,279	1.48%					
2019-20	4,955	6,355	11,310	0.27%					
2020-21	4,970	6,090	11,060	-2.26%					
2021-22	4,985	6,075	11,060	0.00%					

6.0 Source: IRDA Annual Reports

Figure 5: Number of Life Insurance Offices



**Table 6 and Figure 6** shows the number of new life insurance policies issued in totality by life insurance companies from 2015 to 2022. In these seven years, the lowest total number of new policies were issued in 2019-20 at 228.47 lakhs, while the highest in 2021-22 at 291.13 lakhs. In certain years, it showed positive growth, while in others, it displays negative growth. During the seven years, the total number of policies issued had the highest overall negative growth (-2.56%) in the year 2020-21, and the highest positive growth (6.17%) in 2017-18. The total number of life insurance policies issued overall has increased from 267.38 lakhs in 2015-16 to 291.13 lakhs in 2021-22.

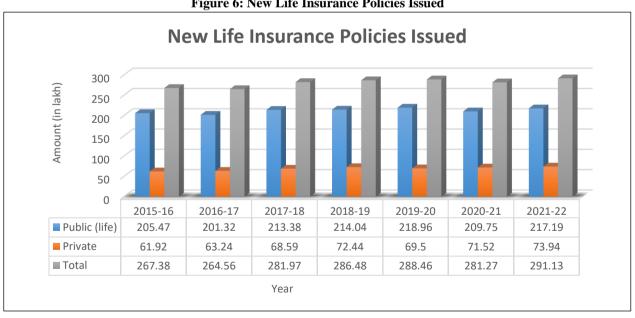
The data reveals that the number of policies issued by private life insurance companies rose from 61.92 lakhs in 2015-16 to 73.94 lakhs in 2021-22, while public companies experienced an increase from 205.47 lakhs to 217.19 lakhs during the same period. LIC accounted for 74.60% of the total policies issued, marking a 3.54% increase, whereas the private sector life insurance companies issued 25.40% of the policies, reflecting a 3.38% increase.

Table 6: New Life Insurance Policies Issued

New Life	New Life Insurance Policies Issued (in lakhs)										
Year	Public	Growth (%)	Private	Growth (%)	Total	Growth (%)					
2015-16	205.47		61.92		267.38						
2016-17	201.32	-2.06%	63.24	2%	264.56	-1.07%					
2017-18	213.38	5.65%	68.59	8%	281.97	6.17%					
2018-19	214.04	0.31%	72.44	5%	286.48	1.57%					
2019-20	218.96	2.25%	69.5	-4%	288.46	.69%					
2020-21	209.75	-4.39%	71.52	3%	281.27	-2.56%					
2021-22	217.19	3.43%	73.94	3%	291.13	3.39%					

Source: IRDA Annual Reports

Figure 6: New Life Insurance Policies Issued



### **6.1**Testing of Hypothesis

Two sets of alternative and null hypotheses have been formulated by the objective.

H01: There is no significant relationship between the total amount of life insurance premium and total commission

H1: There is a significant relationship between the total amount of life insurance premium and total commission expenses.

A correlation model has been developed for the study which shows the strength and direction of relationship between the total amount of life insurance premium paid and total commission expenses paid by the company to the agents.

**Table 7: Descriptive Statistics** 

<b>Descriptive Statistics (in</b>	ı lakhs)		
	Mean	Std. Deviation	N
Premium	52,0945.2414	11,6925.77353	7
<b>Commission Expenses</b>	27,695.2086	5,629.41553	7

**Table 8: Correlations** 

Correlations	Correlations							
		<b>Commission Expenses</b>	Premium Amount					
	Pearson Correlation	1	.995**					
Commission Expenses	Sig. (2-tailed)		.000					
	N	7	7					
	Pearson Correlation	.995**	1					
Premium Amount	Sig. (2-tailed)	.000						
	N	7	7					

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

The relationship between the total amount of life insurance premium and commission expenses is illustrated in **Tables 7** and 8. The mean values for these variables are Rs. 52,0945.241 lakhs and Rs. 27695.20 lakhs, respectively. The analysis reveals a very high correlation of 0.995 between the two factors. With a significance value below 0.05, the null hypothesis is rejected in favor of the alternative hypothesis, indicating that as the premium amount of life insurance increases, commission expenses also increase, and vice versa. Consequently, if a company aims to raise the premium amount for life insurance, it will need to increase agent commissions accordingly. This suggests a direct relationship between premium amounts and commission expenses in the life insurance sector. "there is a significant relationship between the total amount of premium and total commission expenses."

**H02:** There is no significant relationship between the total amount of life insurance premium and the number of life insurance offices, new life insurance policies issued, and commission expenses.

**H12:** There is a significant relationship between the total amount of life insurance premium and the number of life insurance offices, new life insurance policies issued, and commission expenses.

There are a number of factors that influence the total amount of life insurance premiums. In this study, three independent variables have been taken, i.e., the number of life insurance offices, new policies issued, and commission expenses; while the total amount of life insurance premium is the dependent variable. For the analysis of the relationship between the dependent and independent variables, a regression model has been developed.

**Model 1:** Total amount of life insurance premium = intercept ( $\alpha$ ) +  $\beta_1$  × Commission Expenses +  $\beta_2$  × Number of Life Insurance Offices +  $\beta_3$  × New Life insurance policy Issued + error term ( $e_t$ )

**Table 9: Regression Model** 

Mode 1	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Sta	Change Statistics			ge Stati	istics	
					R Square Change	F Change	df1	df2	Sig. Chang	F ge	Durb in-

										Wats on
1	.9 9 6 <sup>a</sup>	.993	.986	13862.8277	.993	141.281	3	3ª	.001	3.28 9

- a. Predictors: (Constant), New Life insurance policy issued, Number of Life insurance Offices, Commission Expenses.
- b. Dependent Variable: Total Premium Amount of Life insurance.

Table 9, Table 10 and Table 11 The examination of variables revealed a strong correlation, with an R value of .996, indicating a high degree of correlation between them. The R Square value of 0.993 suggests that these three independent variables explain approximately 99.3% of the variation in the insurance premium outcome. The significance value of the F change, which is .001, is less than 0.05, leading to the acceptance of the alternative hypothesis and rejection of the null hypothesis. In other words, this supports the validity of Model 1. When considering the margin of error, the R Square value can range from 0.986 to 0.993On the basis of analysis, it can be concluded that there is a significant relationship between the dependent variable (the total amount of life insurance premium) and the independent variables (number of life insurance offices, new life insurance policy issued, and commission expenses).

**Table 10: Independent Variable Coefficient** 

(	Coefficients <sup>a</sup>					
•	Madal	Unstandardiz	ed Coefficients	Standardized Coefficients	4	C!~
ľ	Model	В	Std. Error	Beta	-L	Sig.
	(Constant)	-276782.317	625925.596		442	.688
1	Commission expenses	23.382	2.770	1.126	8.441	.003
I	Number of life insurance offices	63.210	88.577	.069	.714	.527
	New life insurance policies issued	-1973.024	1919.155	174	-1.028	.380

**Table 10** (Independent variable coefficient) depicts the coefficient of independent variables ( $\beta_1$ ,  $\beta_2$ , and  $\beta_3$ ) and intercept ( $\alpha$ ). As the above table shows, the significance value of the independent variable commission expenses is less than 0.05. On the other hand, the number of life offices and new life insurance policies issued do not have a significant effect on the total amount of life insurance premiums as their significance value is greater than 0.05. On the basis of the above table, the Model 1 equation will become as follows using these values.

**Table 11: ANOVA Table** 

A	ANOVA a										
N	Iodel	Sum of Squares	DF	Mean Square	F	Sig.					
	Regression	81453285122.746	3	27151095040.915	141.281	.001 <sup>b</sup>					
1	Residual	576533975.495	3	192177991.832							
	Total	82029819098.241	6								

a. Dependent Variable: Premium Amount

b. Predictors: (Constant), New Life insurance policies issued, Number of Life Insurance Offices, Commission Expenses **Model 1:** Total Amount of Life Insurance Premium =  $(-276782.317) + 23.382 \times \text{Commission Expenses} + 63.210 \times \text{Number}$  of Life Insurance Offices +  $(-1973.024) \times \text{New Life insurance policy Issued} + \text{error term (e}_t)$ .

**In summary**, since the null hypothesis is rejected and the alternative hypothesis accepted, it means that there is a significant influence of commission expenses, new life insurance policies issued, and the number of the life insurance office on the total amount of life insurance premiums.

#### 6. Findings of the Study

- The density of life insurance and non-life insurance companies has increased from \$43.2 in 2015-16 to \$69 in 2021-22 and from \$11.5 in 2015-16 to \$22 in 2021-22 and total density increased from \$54.7 in 2015-16 to \$91 in 2021-22.
- The penetration of life and non-life insurance showed increasing trend for some period, for some period it was stable, and for some period it showed a declining trend. The total amount of premium showed an increasing trend; which increased from Rs. 3,66,943.23 crores in 2015-16 to Rs. 692614.14 crores in 2021-22. The life insurance premiums of both the Life Insurance Corporation of India (LIC) and private life insurance companies exhibited an upward trajectory, rising from Rs. 2,66,444.21 crores in 2015-16 to Rs. 4,28,024.97 crores in 2021-22 for LIC, and from Rs. 1,00,499.02 crores in 2015-16 to Rs. 2,64,589.17 crores in 2021-22 for private life insurance companies
- The commission expenses of both public and private life insurance companies increased; from Rs. 15,500.33 crores in 2015-16 to Rs. 23,171.469 crores in 2021-22, and from Rs. 4,766.36 crores in 2015-16 to Rs. 12,715.86 crores in 2021-22 respectively. It shows that the amount of commission expenses of the public life insurance companies is higher than the private life insurance companies.
- Over the period from 2015-16 to 2021-22, there was a notable shift in market dynamics within the life insurance sector. The share of public life insurance companies decreased from 72.61% to 61.8%, while the market share of private life insurance companies demonstrated an upward trend, rising from 27.39% to 38.2%. This trend suggests a growing reliance on private life insurance companies compared to their public sector counterparts among consumers during the specified study period from 2015 to 2022
- It was observed the total growth of new life insurance policies issued increased from negative -1.07% in 2015-16 to positive 3.39% in 2021-22. Although public sector companies experience greater development than private sector companies, a recent study has indicated that private companies hold a larger market share in terms of occupied growth.
- There is a significant relationship between the total amount of premium and commission expenses. The correlation analysis showed a highly positive relationship 0.995 between the total amount of premium and commission.
- The regression analysis and ANOVA table gave the significance value of less than 0.05, hence, the alternative hypothesis was accepted and the null hypothesis was rejected. It means that the number of new policies issued, number of offices, and commission expenses have a significant impact on the premium amount of the life insurance companies.

### 7. Conclusion

From the time of the Vedic civilization, insurance has been existing in India. Our nation has the largest population of youth and middle as well as lower-class income people. In both life insurance and non-life insurance market, there is a huge untapped market in India. In the year 2015, the Indian Government launched the Ayushman Bharat Yojana focused on below poverty line (BPL) people. Ayushman Bharat Yojana is the largest life insurance scheme in the world. The expansion of life insurance companies from the years 2015 to 2022 in terms of insurance density and penetration, commission expenses, no. of policies issued, no. of offices opened and premium amount was done. On the basis of the findings of this study, it is revealed that the premium amount, number of policies issued, number of offices and commission expenses have a significant role in the life insurance industry. India is the fastest-growing country in the world and the insurance sector is a very crucial sector for any country's economic growth and prosperity.

### 8. Scope for Future Studies

Further studies can be done taking the non-life insurance/general insurance sector. Similar studies may be conducted for a longer period or a period other than the period of this study. Further analyses may be done taking different or more independent variables. A comparative study can also be undertaken between private and public companies. An investigation can be done into the insurance sector between India and any other country. Additional techniques are available for assessing company performance besides correlation, percentage, trend ANOVA, and regression analysis which can be used in studies in the future. Further studies can be conducted based on both qualitative (satisfaction of consumer) and quantitative (profit and liquidity) analysis.

### References:

1. Behailu, K. (2022). "Factors Affecting Customer Retention in Life Insurance Sector: The case of Ethio Life and General Insurance Company" (elig) (thesis).

- 2. D. (2020), "Factors affecting Customers Investment towards Life Insurance Policies", International Journal in Commerce, IT and Social Sciences, Vol. 7, No. 1, pp. 17–29.
- 3. Deka, (2023), "Growth and Performance of Public and Private Life Insurance Companies: An evaluative study", Journal of Arts, Humanities and Social Sciences, Vol. 6, NO. 1, pp. 21–28. https://doi.org/10.2018/ss/202301003.
- 4. Dhar P, (2018), "Growth of Life Insurance Business in India", A study. International Journal of Applied Science and Engineering, Vol. 6, No. 1, https://doi.org/10.30954/2322-0465.1.2018.3.
- 5. Gairola, (2016), "A Comparative Study of Public and Private Life Insurance Companies in Post Liberalization era", International Journal of Management & Business Studies, Vol. 6, No. 4, pp. 39–43.
- 6. Gawali, (2019), "Indian Insurance Sector in India: Challenges and Opportunities", Think India Journal, Vol. 22, No. 14, pp. 5525–5528. https://thinkindiaquarterly.org/index.php/think-india/article/view/13986/9232.
- 7. Gebreal, (2016), "Challenges and Opportunities of Life Insurance Business in Ethiopia", International Journal of Social Sciences, Arts and Humanities, vol. 2, No. 1, pp. 12–22.
- 8. Ghosh A, (2013), "Does Life Insurance activity promote Economic Development in India: An Empirical Analysis", Journal of Asia Business Studies, Vol. 7, No. 1, pp. 31–43. https://doi.org/10.1108/15587891311301007.
- 9. Gupta, (2022), "Customer Satisfaction of Public Sector and Private Sector Life Insurance Company with reference to Nagpur City, India: A Comparative Analysis", International Journal for Modern Trends in Science and Technology, Vol. 8, No. 1, pp. 237–239. https://doi.org/10.46501/ijmtst0801041.
- 10. Hebbar Shenoy, and Rao (2014), "An Empirical Study on Private Health Insurance in Rural areas of India: Challenges and Opportunities", International Research Journal of Business and Management, Vol. vii, No.13, pp. 1–10.
- 11. Kumari. (2013), "Performance Evaluation of Indian Life Insurance Industry in Post Liberalization". International Journal of Social Sciences Arts and Humanities, Vol. 1, pp. 7–14.
- 12. Mazhar. (2019), "Performance of Indian Insurance Industry "A Case of Life Insurance Corporation of India", Researchgate.net, Vol. 1, pp. 175–180. https://doi.org/10.13140/rg.2.2.27300.71042.
- 13. R. and Satuluri, (2019), "A study on Life Insurance Penetration in India", International Journal of Human Resource Management and Research (IJHRMR), Vol. 9, No. 1, pp.119–124.
- 14. Rai, (2022), "Indian Insurance Scenario A Critical Review on Life Insurance Industry", International Journal of Advances in Engineering and Management (IJAEM), Vol. 4 No. 6, pp. 802–809. Https://doi.org/10.35629/5252-0406802809.
- 15. Sengupta, Patnaik, and Mishra, (2015), "Indian Insurance Industry An overview", International Journal in Commerce, II & Social Sciences, Vol.02, No.08, pp. 93–103.
- 16. Sharma, and Singh Chowhan. (2012), "Recently Trends in Life Insurance Sector A Study after Privatization", Indian Journal of Research, Vol. 1 No. 12, pp. 138–139.
- 17. Singh and Ali, (2020), "Analysis of Growth of Life Insurance Industry in India: A Comparative Study of Public and Private Sector", International Journal of Advanced Research in Engineering and Technology (IJARET), Vol. 11, No. 7, pp. 808–823.
- 18. Srivastava, (2020), "A Study on Opportunities and Challenges in Life Insurance Industry in A Critical review on Life Insurance Industry", International Journal of Advances in Engineering and Management.

#### Websites

\*Insurance Regulatory and Development Authority (IRDA), https://irdai.gov.in.