



PERFORMANCE OF MICROINSURANCE IN INDIA: - A TIME SERIES ANALYSIS

Dr. Rajesh Kumar, Associate Professor,
Dept. of Commerce, DAV College Pundri

Abstract

The Insurance Regulatory and Development Authority of India (IRDAI) has evolved microinsurance policies to promote insurance coverage among the economically vulnerable segments of society. A microinsurance product is designed to meet the needs of people whose main requirement is basic life insurance coverages, such as the payment of an insurance benefit upon death of livelihood, family or health insurance, etc. *The Microinsurance Regulation (2005)* has helped the growth of regulated microinsurance in India. The present study is an attempt to measure the performance of micro insurance in India under individual as well as group category. For this purpose, the secondary data from 2009 to 2020 has been used which was collected from Handbook of Statistics on Insurance. The results of the study have been presented in the form of tables and graphs. The data was analysed with the help of percentage and Compound Annual Growth Rate (CAGR) to achieve the objectives of the study. It can be concluded from the study that the life Insurance Corporation of India has contributed the most both in terms of the policies sold and in the collection of premiums under individual as well as group category. Micro insurance business was procured largely under the group portfolio. The analysis indicated that the new insurance business is expected to grow at CAGR of 8.79% and 3.64% in case of private sector and public sector insurers respectively during 2021 to 2025 under individual category. The study shows that new insurance business is expected to the level of ₹ 2071.82 lakh, ₹ 5526.20 lakh and ₹ 7598.01 of private sector insurers, LIC and insurance industry respectively in the year 2025 under individual category, whereas the same is expected to be ₹ 375039.90 lakh, ₹ 26021.51 lakh and ₹ 401061.41 lakh of private sector insurers, LIC and insurance industry as a whole in the year 2025 under the group insurance category. The analysis also shows that performance of LIC is better than the private sector insurers as far as the claim settlement is concerned. The claims of the private and public sector insurers are expected to be ₹ 287.42 lakh and ₹ 1500.51 lakh respectively in the year 2025, the same is expected to be ₹ 1787.94 lakh for the industry under individual category.

Key Words: - Microinsurance, Claim ratio, LIC, Insurance Premium

Introduction

The microinsurance policy is aimed at low-income clients living in rural areas; who are illiterate or unfamiliar with insurance; who tend to run more risks than other classes in society; more prone to illness due to unsafe work or malnutrition with little or no experience in dealing with the financial institutions. It is a type of insurance designed to make essential insurance products more affordable. Basically, microinsurance is a financial arrangement to protect

underprivileged people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved.

The insurance sector represents a predominant role for the prosperity of its economy in India. It provides help to individuals by pooling their savings and protecting their future. With the savings that contributed to the insurance industry by individuals, the company can handle claims raised by the insured. The government body oversees the insurance industry in India and acts as the guardian of consumer rights. The success and sustainability of micro insurance mainly depends on maintaining transaction costs down. Articles 32B and 32C of the Insurance Act, 1938 and IRDAI (Obligations of insurers of rural and social sectors) 2015, stipulate the obligations of rural and social sector insurers, who have also contributed substantially to the development and promotion of microinsurance products in India.

With the liberalization of the Indian economy in the 1990s and the government's position in favour of inclusive growth, the Insurance Regulatory and Development Authority Act was passed in 1999 and the insurance sector has been opened up to the private sector. Subsequently, the regulation of microinsurance was introduced in 2005. As a result of these government initiatives to provide risk coverage to the poor, there has been a significant increase in insurance penetration and density in India. The IRDA Microinsurance Regulation 2005 defines microinsurance as a general or life insurance policy with an insured sum of Rs 50,000 or less. Microinsurance aims to provide financial protection to low-income families, especially those whose approximate income is less than Rs. 250 per day. A microinsurance product is designed to meet the needs of people, especially residing in rural areas, whose main requirement is basic life insurance coverages, such as the payment of an insurance benefit upon death of livelihood, family or health insurance, etc. The intention is to provide a low-cost product for these people. A life microinsurance product is therefore a pure term insurance product with or without return of premium, or an endowment insurance product or a health insurance product with or without accident benefit rider. A general microinsurance product includes health insurance, insurance coverage on huts, livestock, tools or implements, or any personal accident contract. The minimum and maximum amounts of the sum insured have been prescribed for each category of products in schedule I and II of the Regulations. A non-governmental organization or a self-help group or a microfinance institution or a non-profit organization (companies registered under Article 25 of the Companies Act 1956) may be appointed by an insurer to act in as a microinsurance agent. The regulation provides for a link between a life insurance company and a general insurance company to offer a client both life and general microinsurance products together.

Review of Literature

Aquino (2008) conducted a time-series study as well as regression analysis study on different parameters like, direct premium level, GDP, underwriting profit, operating profit and total investment return etc. based on property and casualty insurance data during the period 1984 to 2006 in order to identify the underwriting cycle pattern prevalent in the US market.

Vinayagamoorthy et al. (2012) concluded in their study titled "A Study on microinsurance in India" that microinsurance has remained the second choice in financial inclusion after credit products by microfinance institutions, which was the first choice in India. The significance of microinsurance as social security and business opportunity was hardly emphasized.

Varshini and Suresh (2013) in their paper entitled “A study on performance of life micro insurance in Mysore City” found that the majority of the policyholders were women who were more aware of life microinsurance than men. They explained that it was due to the establishment of Self-Help Groups which constitutes only women. Income is not a barrier in paying a premium because 50 percent of the premium is borne by the nodal agency. They also found that married people were more responsible than the unmarried and major reason for buying life microinsurance was to avail death benefit.

Farooqui F. (2013) in his paper titled “Role of micro finance institutions” analyzed the role of microfinance institution in the microinsurance in Allahabad district using a purposive sampling technique to collect the primary data through questionnaire and personal interviews of two leading MFI, Sonata and Utkarsh 140 beneficiary in which 78 respondents were male and 62 were females. The study found that awareness of microinsurance products was low especially in female respondents. The role of MFIs was not significant in creating awareness among respondents and respondents were not satisfied with the insurance services provided by MFIs.

Geetha and Vijayalakshmi (2014) in their study conducted a study in Coimbatore in 2013 with a sample of 100 Microinsurance (life) insured to analyze socioeconomic determinants of MI (life) demand and the level of satisfaction of insured. The study used both primary and secondary data. The study found that the majority of the respondents were aware of all important features.

Paramasivam and Rajaram (2016) in their paper titled “Micro analysis a conceptual analysis” found that microinsurance is affordable to poor people. It mitigates the risk caused by nature or any other events. There is a need to create more awareness so that it is more accessible for unreached.

Priti Bakshi (2016) conducted a study on “Review of Progress and Potential of Micro Insurance in India” and found that micro insurance is important in supporting the sustainable development of the poor and reducing the inequality in developing countries like India. Micro insurance is like a magic treatment for the main disease (poverty) prevailing in the economy. The study also state that the development of micro insurance is both a moral and an economic imperative, not only for achieving the inclusive financial systems but also for the equitable mitigation of risks.

Subhabaha Pal at el. (2017) conducted a study titled “Forecasting performance of Indian non-life insurance industry – an analysis of underwriting experience of public and private insurance companies”. They found that the public non-life insurance companies will touch earning 1 Lakh Crore INR premium revenue by 2022-2023. The non-life insurance sector (both public and private together) will be fetching 1 Lakh Crore INR premium revenue by 2019 and 2 Lakh Crore INR as premium revenue from 2024 FY giving huge boost to the economy. As revealed from the forecasted results, the public insurance companies will become more economic in terms of operations and will maintain around 110 is combined ratio value in the coming years which will be a very good achievement for them. Private non-life insurance companies will maintain the combined ratio at around 102 due to their optimized operational capabilities.

Jayakumar A. and Almeida S. M. (2018) conducted a study on “Erudition and role of Micro Insurance in India”. They found that risk mitigation becomes an important aspect to the poor people as their income is limited and their livelihood is equally dependent on their health as well as their future life being the recipients of majority of risk in life. If large insurance companies can adapt to the regional sensitivities and also provide awareness through the various schemes introduced by the government to the poor section and also educate them about the benefits and premium payment, microinsurance will thus, aid and offer a huge opportunity for the insurers to penetrate into the new markets and also build a more flexible and better economy.

Bodla, Sumit at el. (2017) find that the life insurance industry has made a remarkable growth of premium after the entry of private players. The CAGR of net premium has been worked out at 8.89 % for the last 10 years. The highest CAGR in net premium was found in case of Max Life followed, very closely, by HDFC Standard, PNB MetLife and SBI Life. IDBI Federal Life has a CAGR of 20.42% during 2007-2011, 10.98% during 2012-16 and 14.47% during 2007-2016. CAGR of net premium gives a worrisome position for Aviva, Tata AIA, Bajaj Allianz, Birla Sunlife and Reliance Nippon as the growth rate was found negative during 2012-16 for these companies.

Renu Bala (2019) in her study titled “Micro-insurance in India: Role of public and private insurers” found that public sector is leading in both policies issued, a number of lives covered in both individual and group business. However, their claims services need to be improved. The private insurers are relying on other micro insurance agents for business, and have a less significant share in the group insurance business.

Objectives of the Study

The study aims to achieve the following objectives:

- 1) To analyse growth of micro-insurance business in India during 2009-2020;
- 2) To compare the performance of private sector and public sector micro-insurance portfolio; and
- 3) To predict the performance of micro-insurance in India till 2025

Research Methodology

The present study is based on the on the secondary data collected from Handbook on Insurance Statistics for the year 2013-14 and 2019-20. The data has been taken on the various variables i.e., on new insurance business, total claims, claims paid, claims repudiated and claims pending at the end of the years of the private sector insurer as well as public sector insurers and the insurance industry as a whole. The data under study has been collected from the year 2009 to 2020. The data has been presented in the form of tables and graphs and has been analysed with the help of Percentage and Compound Annual Growth Rate (CAGR).

CAGR has been calculated by applying the following formula in excel:

$$CAGR = \left(\frac{EV}{BV} \right)^{\frac{1}{n}} - 1$$

where:

EV=Ending value

BV=Beginning value

n=Number of years

Trend Analysis for forecasting

The Least Square is the best method for obtaining the trend values. It gives a convenient basis for calculating the line of best fit for the time series. It is a mathematical method for measuring trend.

Procedure:

(i) The straight line trend is represented by the equation $Y = a + bX$... (1)

where Y is the actual value of the dependent variable, X is time, a, b are constants

(ii) The constants 'a' and 'b' are estimated by solving the following two normal

Equations $\Sigma Y = n a + b \Sigma X$... (2)

$\Sigma XY = a \Sigma X + b \Sigma X^2$... (3)

Where 'n' = number of years given in the data.

(iii) By taking the mid-point of the time as the origin, we get $\Sigma X = 0$

(iv) When $\Sigma X = 0$, the two normal equations reduce to

$$\Sigma Y = n a + b (0) \quad ; \quad a = \frac{\Sigma Y}{n} = \bar{Y}$$

$$\Sigma XY = a(0) + b \Sigma X^2 \quad ; \quad b = \frac{\Sigma XY}{\Sigma X^2}$$

The constant 'a' gives the mean of Y and 'b' gives the rate of change (slope).

(v) By substituting the values of 'a' and 'b' in the trend equation (1), we get the Line of Best Fit.

Future forecasts made by this method are based only on trend values. The forecasted values have been calculated by using excel. The Claim ratio has been calculated by dividing the claims paid to total claims.

Analysis and Interpretation

The growth of new business and forecast under micro-insurance portfolio in individual category in case of India during the study period is shown in table 1. It is obvious from the table that the new business of private sector insurers has registered a negative CAGR (-1.47%) during 2009-2020, whereas it has grown by 19.54% annually in case of LIC. The overall CAGR of new business under micro insurance has grown by 18.04% annually during the corresponding period. The analysis has indicated that the new business is expected to grow at CAGR of 8.79% and 3.64% in case of private sector and public sector insurers respectively during 2021 to 2025. Thus private sector is expected to grow faster than LIC in the coming five years in so far as new micro insurance business is concerned.

The table further indicates that LIC has dominated in new business as it is having maximum percentage of premium received except in the year 2017 and 2018 in which it has collected less than 50% of the total premium. In the years 2010- 2014 and 2020, the private sector insurers have their share even less than 10% of the total business of the industry which shows that the majority of the business is owned by the public sector insurer. Furthermore, it is also evident from the table that new insurance business is expected to the level of ₹ 2071.82 lakh, ₹ 5526.20 lakh and ₹ 7598.01 of private, LIC and insurance industry respectively in the year 2025.

Table 1: Growth of New Business under Micro-Insurance Portfolio in India during 2009 to 2020 and its Forecast from 2021 to 2025 (Individual Category)

Year	Private		LIC		Total	
	Premium In ₹ lakhs	No of Policies	Premium In ₹ lakhs	No of Policies	Premium In ₹ lakhs	No of Policies
2009	537.80 (14.71)	610851	3118.74 (85.29)	1541218	3656.55 (100)	2152069
2010	839.78 (5.31)	998809	14982.51 (94.69)	1985145	15822.29 (100)	2983954
2011	735.09 (5.64)	699733	12305.76 (94.36)	2951235	13040.85 (100)	3650968
2012	964.22 (8.34)	793660	10603.49 (91.66)	3826783	11567.71 (100)	4620443
2013	1018.54 (9.29)	695904	9949.05 (90.71)	4340235	10967.59 (100)	5036139
2014	929.29 (9.72)	561339	8635.77 (90.28)	2205820	9565.06 (100)	2767159
2015	1249.22 (43.23)	416027	1640.23 (56.77)	400341	2889.45 (100)	816368
2016	1217.95 (38.40)	458655	1953.78 (61.60)	452291	3171.73 (100)	910946
2017	2234.37 (58.47)	475269	1587.13 (41.53)	480892	3821.50 (100)	956161
2018	2917.02 (62.01)	274470	1786.81 (37.99)	564541	4703.83 (100)	839011
2019	1118.44 (34.84)	247444	2091.43 (65.16)	617653	3209.87 (100)	865097
2020	456.74 (2.02)	169017	22208.97 (97.98)	859375	22665.71 (100)	1028392
2021*	1733.93		6305.54		8039.47	
2022*	1818.40		6110.71		7929.11	
2023*	1902.87		5915.87		7818.74	
2024*	1987.35		5721.03		7708.38	
2025*	2071.82		5526.20		7598.01	
CAGR -(2009-20)	-1.47%		19.54%		18.04%	
CAGR- (2021-25)*	8.79%		3.64%		4.68%	

Source: Handbook on Indian Insurance Statistics 2013-14 & 2019-20; * Forecasted; Figures in parenthesis shows the percentage of premium.

Table 2 reveals the new business performance and forecast under micro insurance portfolio in group insurance category. It is clear from the table that LIC has recorded a negative CAGR of -13.61% during the period 2009 to 2020, whereas the private sector insurers have registered CAGR of as high as 55.88% during the same period. The overall CAGR of new business under micro insurance in the group category has indicated CAGR of 32.17% for this period. The examination of the table further reveals that the new business is anticipated to grow at CAGR of 34.35% and 2.60% in case of private sector and public sector insurers respectively during the next five years, whereas the insurance industry as a whole look forward to 20.39% CAGR in the corresponding period. Thus, the private sector is expected to grow faster than LIC over the next five years when it comes to new microinsurance activities. However, in terms of the

share in new business under the microinsurance portfolio LIC had an edge till 2017 but after it, the private sector has dominated. The table also shows that except in the year 2018 to 2020 the private sector insurers have less than 30% of the new business as far as the premium collection is concerned. In the earlier years from 2009 to 2017 the LIC has commanded in the new insurance business in the group category. The table further indicates that the new insurance business is expected to be ₹ 375039.90 lakh and ₹ 26021.51 lakh of private sector and public sector insurers respectively whereas the aggregate new business is expected to be ₹ 401061.41 lakh for the insurance industry as a whole in the year 2025 in the group insurance category.

Table 2: Growth of New Business under Micro-Insurance Portfolio in India during 2009 to 2020 and its Forecast from 2021 to 2025 (Group Category)

Year	Private		LIC		Total	
	Premium In ₹ lakhs	No of lives covered	Premium In ₹ lakhs	No of lives covered	Premium In ₹ lakhs	No of lives covered
2009	3326.80 (16.15)	1498994	17268.54 (83.85)	11052815	20595.34 (100)	12551809
2010	1472.09 (6.05)	1895143	22869.72 (93.95)	14946927	24341.81 (100)	16842070
2011	1719.14 (11.07)	1983537	13803.67 (88.93)	13275464	15522.81 (100)	15259001
2012	1150.67 (10.48)	750555	9831.63 (89.52)	9444349	10982.30 (100)	10194904
2013	756.89 (3.47)	757450	21045.76 (96.53)	13223872	21802.65 (100)	13981322
2014	1595.23 (11.25)	1291741	12581.45 (88.75)	11887303	14176.68 (100)	13179044
2015	3368.98 (10.67)	2555150	28193.80 (89.33)	20596725	31562.78 (100)	23151875
2016	4816.67 (15.93)	6650805	25426.39 (84.07)	22603919	30243.06 (100)	29254724
2017	12035.36 (26.14)	9281170	34007.62 (73.86)	22965393	46042.98 (100)	32246563
2018	75452.04 (54.42)	21586921	63184.98 (45.58)	37316017	138637.02 (100)	58902938
2019	320573.78 (100)	121307855	0.00 (0.00)	0	320573.78 (100)	121307855
2020	439190.29 (99.22)	134932822	3455.13 (0.78)	5796172	442645.42 (100)	140728994
2021*	259642.41		24098.04		283740.45	
2022*	288491.79		24578.90		313070.69	
2023*	317341.16		25059.77		342400.93	
2024*	346190.53		25540.64		371731.17	
2025*	375039.90		26021.51		401061.41	
CAGR (2009 to 2020)	55.88%		-13.61%		32.17%	
CAGR- (2021- 25)*	34.35%		2.60%		20.39%	

Source: Handbook on Indian Insurance Statistics 2013-14 & 2019-20; * Forecasted; Figures in parenthesis shows the percentage of premium.

Table 3: Sector-wise Death Claim Settlement under Micro-Insurance Portfolio in India during 2010 to 2020 and its Forecast from 2021 to 2025 (Individual Category)

Year	Private					LIC				
	Total Claims		Claims Paid		Claim Ratio	Total Claims		Claims Paid		Claim Ratio
	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)		No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)	
2010	3441	188.31	3406	182.05	96.68%	4133	642.92	4102	637.17	99.11%
2011	4071	514.59	4039	505.23	98.18%	7320	1190.17	7244	1174.12	98.65%
2012	5033	580.83	5010	568.72	97.92%	9615	1558.06	9499	1540.38	98.87%
2013	3289	326.74	3253	315.47	96.55%	11753	1974.00	11647	1954.95	99.03%
2014	3583	361.45	3562	357.62	98.94%	12136	2022.98	12048	2005.35	99.13%
2015	1814	405.39	1773	339.86	83.84%	11582	1845.48	11365	1817.67	98.49%
2016	4490	607.82	4427	483.33	79.52%	9749	1584.27	9632	1563.55	98.69%
2017	4292	597.76	4244	526.95	88.15%	8898	1547.44	8470	1494.90	96.60%
2018	2925	271.60	2909	260.41	95.88%	7353	1324.68	7228	1304.15	98.45%
2019	2709	304.34	2688	295.16	96.98%	6741	1193.29	6707	1181.40	99.00%
2020	1815	154.11	1805	153.59	99.66%	6571	1136.07	6516	1117.49	98.36%
2021*		329.29		288.46			1482.83		1455.20	
2022*		318.82		276.11			1487.25		1458.47	
2023*		308.36		263.76			1491.67		1461.75	
2024*		297.89		251.40			1496.09		1465.02	
2025*		287.42		239.05			1500.51		1468.30	
CAGR (2010 to 2020)		-1.98%		-1.69%			5.86%		5.78%	
CAGR- (2021- 25)*		2.86%		1.83%			5.81%		5.72%	

Source: Handbook on Indian Insurance Statistics 2013-14 & 2019-20; * Forecasted.

The claim settlement and its forecast under micro insurance portfolio in individual category is exhibited by table 3. On examination of the table, it is clear that private sector insurers have shown negative CAGR of -1.98% and -1.69% for the total claims and claims paid for the period 2010 to 2020, whereas LIC has the CAGR of 5.86% and 5.78% for the same period. The CAGR of the insurance industry for the corresponding period is 4.49% for the total claims as well as

for the claims paid which is shown by table 4. The forecasted CAGR of claims paid is expected to be 1.83% and 5.72% in case of private and public sector insurers correspondingly it is 5.02% for the insurance industry (table 4). From the above analysis the performance of LIC seems better than the private sector insurers. The claim settlement ratio of LIC is above 98% in all the years from 2010 to 2020 except in the year 2017 where it is 96.60%. Whereas the private sector insurers have above 98% only in the years 2011, 14 and 20. Moreover in the year 2016 claim settlement ratio of private sector insurers was only 79.52%. It indicates the performance of LIC is better than the private sector insurers as far as the claim settlement is concerned. The claims of the private and public sector insurers are expected to be ₹ 287.42 lakh and ₹ 1500.51 lakh respectively in the year 2025, the same is expected to be ₹ 1787.94 lakh for the industry (table 4). The table 4 also indicates that the claim settlement ratio of the industry varies from 93.38% to 99.10% for the period under study. The forecasted claims of the industry has shown a slight decreasing trend from the year 2021 to 2025 which may be considered as positive indicator.

Table 4: Aggregate Death Claim Settlement of Insurance Industry under Micro-Insurance Portfolio in India during 2010 to 2020 and its Forecast from 2021 to 2025 (Individual Category)

Year	Total Claims		Claims Paid		Claim Ratio
	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)	
2010	7574	831.23	7508	819.22	98.56%
2011	11391	1704.76	11283	1679.35	98.51%
2012	14648	2138.89	14509	2109.1	98.61%
2013	15042	2300.74	14900	2270.42	98.68%
2014	15719	2384.43	15610	2362.97	99.10%
2015	13396	2250.87	13138	2157.53	95.85%
2016	14239	2192.09	14059	2046.88	93.38%
2017	13190	2145.2	12714	2021.85	94.25%
2018	10278	1596.29	10137	1564.56	98.01%
2019	9450	1497.63	9395	1476.56	98.59%
2020	8386	1290.18	8321	1271.08	98.52%
2021*		1812.12		1743.66	
2022*		1806.07		1734.58	
2023*		1800.03		1725.50	
2024*		1793.98		1716.43	
2025*		1787.94		1707.35	
CAGR (2010 to 2020)		4.49%		4.49%	
CAGR- (2021- 25)*		5.24%		5.02%	

Source: Handbook on Indian Insurance Statistics 2013-14 & 2019-20; * Forecasted.

Table 5: Sector-wise Death Claim Settlement under Micro-Insurance Portfolio in India during 2010 to 2020 and its Forecast from 2021 to 2025 (Group Category)

Year	Private				Claim Ratio	LIC				Claim Ratio
	Total Claims		Claims Paid			Total Claims		Claims Paid		
	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)		No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)	
2010	2354	603.60	2288	579.57	96.02 %	41662	17328.25	41175	17188.61	99.19 %
2011	4499	1097.25	4285	1028.07	93.70 %	46306	19746.19	45965	19607.62	99.30 %
2012	5920	1173.88	5840	1165.14	99.26 %	124890	40574.70	124421	40432.13	99.65 %
2013	3650	831.65	3573	824.63	99.16 %	140512	43329.41	139242	42947.45	99.12 %
2014	4118	969.48	4069	958.20	98.84 %	138720	44055.19	138048	43840.08	99.51 %
2015	5918	1347.88	5771	1310.55	97.23 %	127836	41477.61	127751	41443.90	99.92 %
2016	14479	3305.00	14429	3290.91	99.57 %	117854	38123.00	117827	38111.30	99.97 %
2017	35978	8055.77	35348	7914.82	98.25 %	144318	47126.27	144194	47089.22	99.92 %
2018	61934	15914.88	61682	15844.67	99.56 %	155615	97657.34	155602	97652.54	100.00 %
2019	301976	88389.46	299451	87501.62	99.00 %	0	0.00	0	0.00	0.00 %
2020	625589	148770.45	619897	147064.63	98.85 %	0	0.00	0	0.00	0.00 %
2021*		87369.56		86436.87			35798.91		35838.03	
2022*		97833.29		96790.24			35865.12		35927.51	
2023*		108297.02		107143.61			35931.34		36016.98	
2024*		118760.74		117496.99			35997.55		36106.46	
2025*		129224.47		127850.36			36063.76		36195.94	
Actual CAGR		73.45%		73.96%			100.00 %		100.00 %	
CAGR-(2021-25)*		43.01%		43.30%			5.01%		5.09%	

Source: Handbook on Indian Insurance Statistics 2013-14 & 2019-20; * Forecasted.

Table 6: Aggregate Death Claim Settlement of Insurance Industry under Micro-Insurance Portfolio in India during 2010 To 2020 and its Forecast from 2021 to 2025 (Group Category)

Year	Total Claims		Claims Paid		Claim Ratio
	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)	
2010	44016	17931.85	43463	17768.18	99.09%
2011	50805	20843.44	50250	20635.69	99.00%
2012	130810	41748.58	130261	41597.27	99.64%
2013	144162	44161.06	142815	43772.08	99.12%
2014	142838	45024.67	142117	44798.28	99.50%
2015	133754	42825.49	133522	42754.45	99.83%
2016	132333	41428.00	132256	41402.21	99.94%
2017	180296	55182.04	179542	55004.04	99.68%
2018	217549	113572.22	217284	113497.21	99.93%
2019	301976	88389.46	299451	87501.62	99.00%
2020	625589	148770.45	619897	147064.63	98.85%
2021*		123168.48		122274.89	
2022*		133698.41		132717.75	
2023*		144228.35		143160.60	
2024*		154758.29		153603.45	
2025*		165288.23		164046.30	
Actual CAGR		23.56%		23.53%	
CAGR- (2021-25)*		15.96%		15.97%	

Source: Handbook on Indian Insurance Statistics 2013-14 & 2019-20; * Forecasted.

Table 5 and 6 show the claim settlement under micro insurance portfolio in India and its forecast under the group category. The tables reveal that the CAGR of total claims of private, public and the insurance industry are 73.45%, -100% (because last two values are zero) and 15.96% respectively. Whereas the CAGR of claims paid for the corresponding period are 73.96%, -100% and 23.53% of the private, public and industry respectively for the corresponding period. The forecasted CAGR of the claims paid are slightly more than the CAGR of total claims of private sector insurer, public sector insurers and the insurance industry which is an indicator of good performance in times to come. The forecasted values for the year 2025 of the total claims are less than the total claims of the year 2020 in case of private insurers which may also be considered as positive indicator. Though the forecasted values of the total

claims for the insurance industry have grown from ₹148770.45 lakh in 2020 to ₹165288.23 lakh in the year 2025 which is also not a significant increase.

An overview of the claim ratio in group category indicates that the performance of public sector insurer is better than the private sector insurers since the claim ratio is above 99% in each of the year under study. The overall claim ratio of the industry is also above 99% in all the years except in the year 2020, which may be considered as good indicator for the insurance industry as a whole.

Table 7: Sector-Wise Death Claims Repudiated and Pending under Micro-Insurance Portfolio in India during 2010 to 2020 (Individual Category)

Year	Private				LIC			
	Claims Repudiated		Claims Pending		Claims Repudiated		Claims Pending	
	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)
2010	28	4.98	7	1.28	25	4.36	5	1.12
2011	28	9.01	4	0.35	60	13.41	16	2.64
2012	20	11.96	3	0.15	99	14.50	17	3.18
2013	26	8.58	10	2.68	67	12.30	36	6.55
2014	19	3.45	2	0.38	52	10.96	34	5.54
2015	40	63.83	1	1.70	207	25.45	9	2.35
2016	63	124.60	0	-0.12	102	15.77	15	4.95
2017	48	70.81	0	0.00	406	43.70	22	8.84
2018	14	10.59	1	0.43	108	12.54	17	7.99
2019	20	9.08	1	0.10	10	1.61	9	7.47
2020	8	0.06	2	0.46	6	2.46	33	14.14
CAGR(2010 to 2020)		-35.72%		-0.10		-5.56%		28.86%

Source: Handbook on Indian Insurance Statistics 2013-14 & 2019-20

Table 8: Aggregate Death Claims Repudiated and Pending of Insurance Industry under Micro-Insurance Portfolio in India during 2010 to 2020 (Individual Category)

Year	Claims Repudiated		Claims Pending	
	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)
2010	53	9.34	12	2.40
2011	88	22.42	20	2.99
2012	119	26.46	20	3.33
2013	93	20.88	46	9.23
2014	71	14.41	36	5.92
2015	247	89.28	10	4.05
2016	165	140.37	15	4.83
2017	454	114.51	22	8.84
2018	122	23.14	18	8.42
2019	30	10.69	10	7.57
2020	14	2.52	35	14.60
CAGR (2010 to 2020)		-12.28%		19.79%

Source: Handbook on Indian Insurance Statistics 2013-14 & 2019-20

Claims repudiated and claims pending under micro insurance portfolio in the individual category is exhibited by the table 7 and 8. It is evident from the tables that the amount of claims repudiated have indicated a CAGR of -35.27% in case of private sector and -5.56% in case of LIC which indicates that the performance of both private as well as public sector insurers have improved considerably in terms of claim rejection rate. The claim rejection rate for the insurance industry is -12.28%. Hence the above analysis indicates that the insurance industry has performed well as far as claim rejection rate is concerned. Claims pending in case of private insurers shows a negative value of ₹ -0.12 lakh in the year 2016 which might be due to excess payment made in that year. The CAGR of the claims pending of private and public sector insurers are -0.10% and 28.86% respectively. It is evident from the CAGR of pending claims that the private sector insurers have commanded over the public sector insurers. The claims repudiated and claims pending for the various years are also exhibited by the following figures 1 and 2.

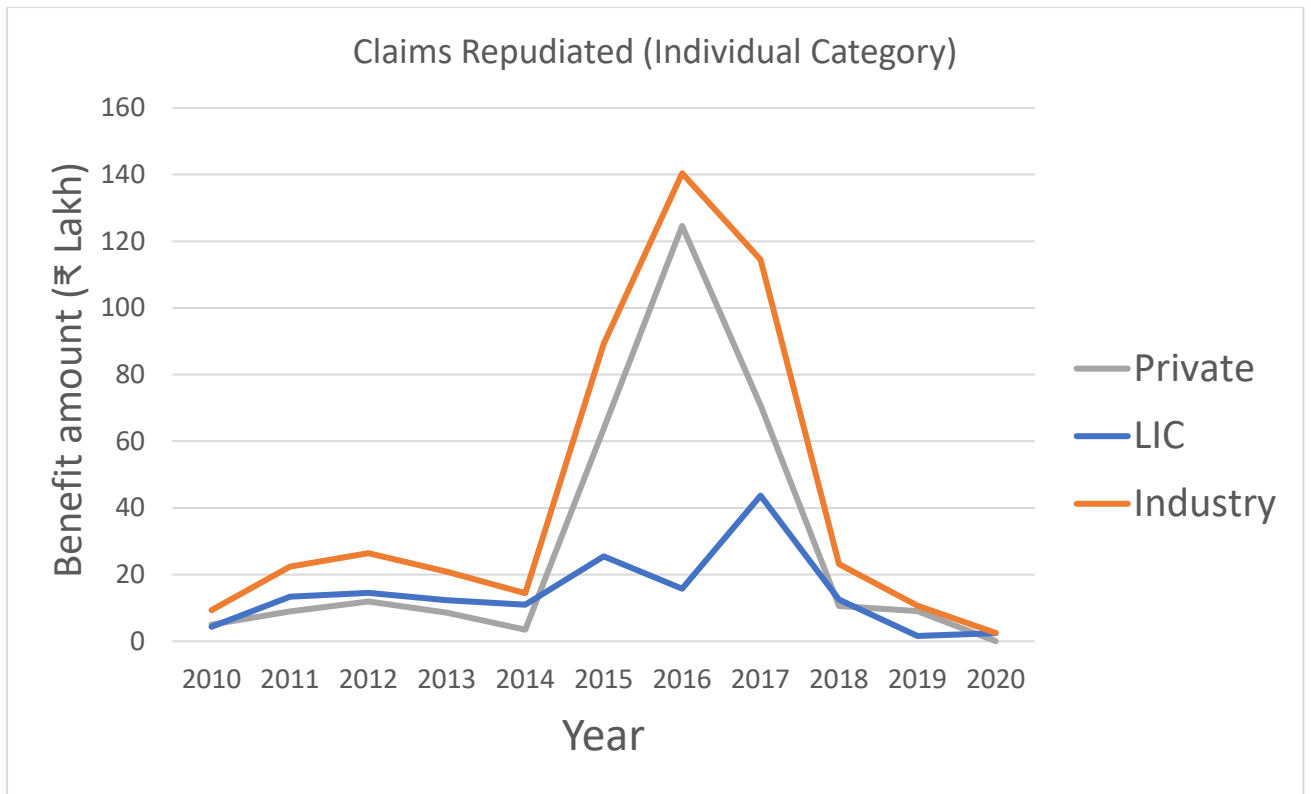


Figure 1

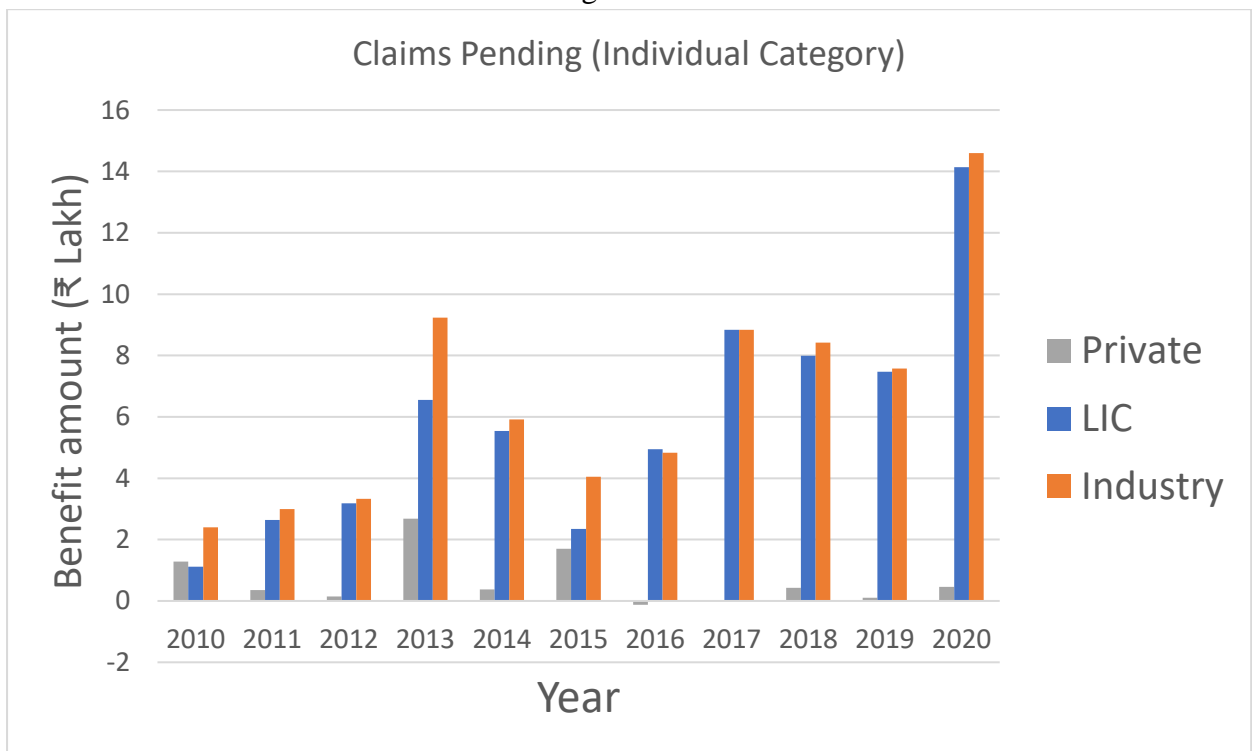


Figure 2

Table 9: Death Claims Repudiated and Pending under Micro-Insurance Portfolio in India during 2010 to 2020 (Group Category)

Year	Private				LIC			
	Claims Repudiated		Claims Pending		Claims Repudiated		Claims Pending	
	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)
2010	62	23.26	4	0.77	0	0	487	139.64
2011	128	42.90	86	26.29	0	0	341	138.57
2012	49	3.93	14	2.34	0	0	469	142.57
2013	58	2.80	19	4.22	0	0	1270	381.96
2014	9	1.06	40	10.22	0	0	672	215.11
2015	21	6.08	126	31.25	76	31.28	9	2
2016	43	11.69	7	2.40	26	11.40	1	0.30
2017	86	27.57	544	113.38	60	18.00	64	19.05
2018	154	41.90	98	28.31	13	4.80	0	0
2019	886	481.50	1639	406.34	0	0	0	0
2020	186	96.09	5506	1608.55	0	0	0	0
CAGR(2010 to 2020)		15.24%		114.78%		0		-100.00%

Source: Handbook on Indian Insurance Statistics 2013-14 & 2019-20

Table 10: Aggregate Death Claims Repudiated and Pending of Insurance Industry under Micro-Insurance Portfolio in India during 2010 to 2020 (Group Category)

Year	Claims Repudiated		Claims Pending	
	No of lives	Benefit amount (₹ Lakh)	No of lives	Benefit amount (₹ Lakh)
2010	62	23.26	491	140.41
2011	128	42.90	427	164.86
2012	49	3.93	483	144.91
2013	58	2.80	1289	386.18
2014	9	1.06	712	225.33
2015	97	37.36	135	33.68
2016	69	23.09	8	2.7
2017	146	45.57	608	132.43
2018	167	46.70	98	28.31
2019	886	481.50	1639	406.34
2020	186	96.09	5506	1608.55
CAGR (2010 to 2020)		15.24%		27.62%

Source: Handbook on Indian Insurance Statistics 2013-14 & 2019-20

Tables 9 and 10 show the death claims repudiated and claim pending under micro insurance portfolio in India during the period of study under the group category. It is obvious from the tables that the CAGR of private sector insurers is 15.24% and the same is of insurance industry because LIC shows a CAGR of 0% for the claims repudiated whereas the CAGR of claims pending is 114.78% of the private sector insurers which shows that private sector insurers could not handle the claims pending in an effective manner. The CAGR of claims pending of the insurance industry as is evident from the table 10 is 27.62%, the same is not a good symbol of performance of the industry in the group category. The figures 3 and 4 also exhibit the position of claims repudiated and claims pending of the private as well as public sector insurers and insurance industry under the group category.

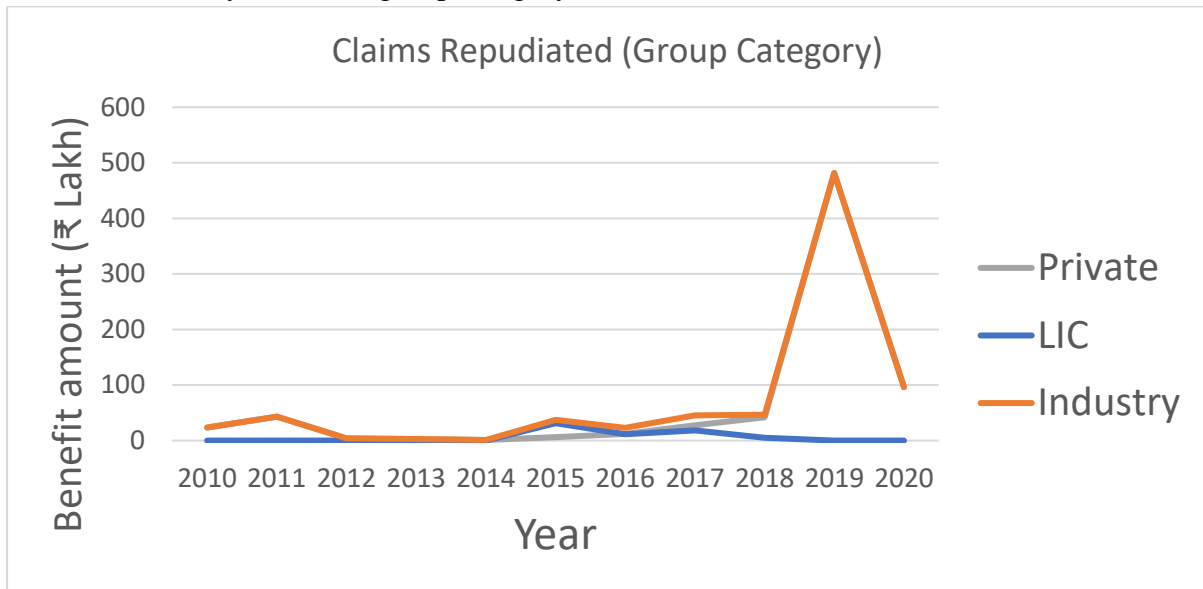


Figure 3

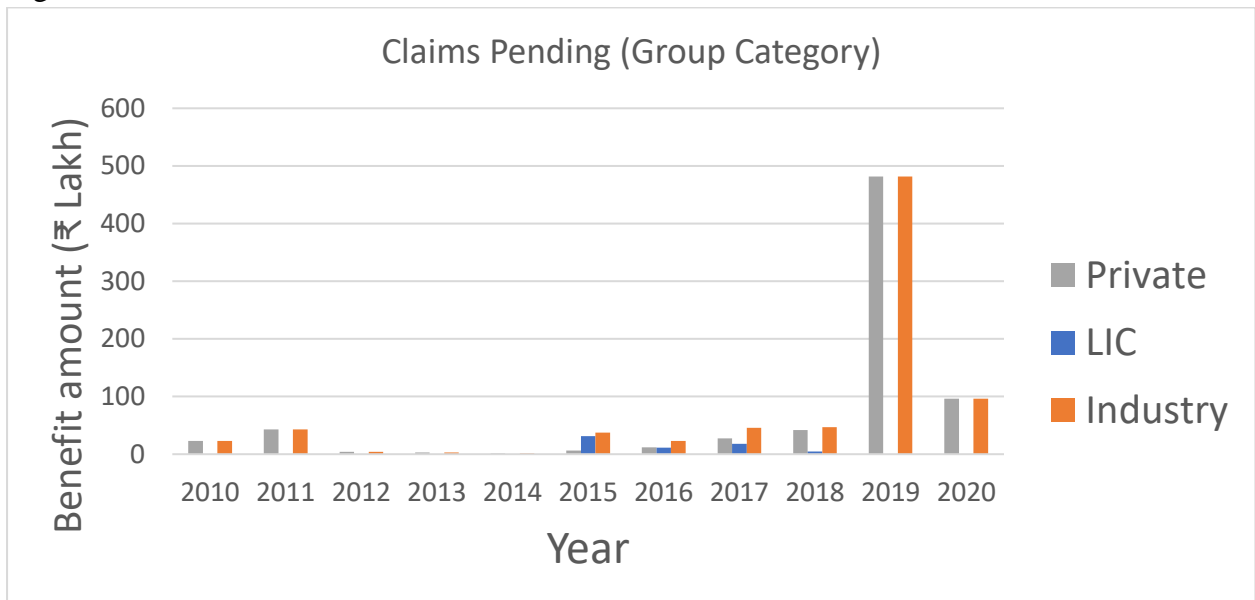


Figure 4

Conclusion

It can be concluded from the above analysis that the new insurance business has shown a decent growth in the private sector insurers as well as in case of LIC though the volumes are still small. The life Insurance Corporation of India has contributed the most both in terms of the policies sold and in the collection of premiums under individual as well as group category. Micro insurance business was procured largely under the group portfolio. The analysis has indicated that the new business is expected to grow at CAGR of 8.79% and 3.64% in case of private sector and public sector insurers respectively during 2021 to 2025 under individual category. The private sector is expected to grow faster than LIC in the coming five years in so far as new micro insurance business is concerned. The analysis indicates that the share of LIC in total new business under micro insurance portfolio has dominated the private sector. Furthermore, it is also evident from above analysis that new insurance business is expected to the level of ₹ 2071.82 lakh, ₹ 5526.20 lakh and ₹ 7598.01 of private, LIC and insurance industry respectively in the year 2025 under individual category. The forecasted CAGR of claims paid is expected to be 1.83% and 5.72% in case of private and public sector insurers in the coming five years under individual category. The forecasted CAGR of the claims paid are slightly more than the CAGR of total claims submitted in case of private sector insurer, public sector insurers and the insurance industry which is an indicator of good performance in times to come under group category.

The amount of claims repudiated have indicated a negative CAGR of -35.27% in case of private sector and -5.56% in case of LIC which indicates that both private as well as public sector insurers have improved considerably in terms of claim rejection rate under individual category. The claim rejection rate for the insurance industry is -12.28%. Hence the above analysis indicates that the insurance industry has performed well as far as claim rejection rate is concerned under individual category.

A recent report published by the Committee on Standalone Microinsurance Company, which was set up by the Insurance Regulatory and Development Authority of India in February, 2020 says that India's plans for financial inclusion must include measures to ensure low-income families in India can take out insurance. The committee found that the entry-level capital requirement for floating a standalone microinsurance company is too high. The report recommends reducing the entry-level capital from the current requirement of INR 1bn (£10.5m) to INR 50m (£524.415), 100m (£1.04m) and 200m (£2.1m) to help accelerate the expansion of the microinsurance market (Anca Voinea: 20 October 2020).

The lowering of the minimum capital entry level would enable more microinsurance companies to be set up in India which would add to growth of this category of insurance. Further, similar to the experience of the Philippines, South Africa and China, the “supportive regulatory frameworks and technology can go a long way in increasing the penetration levels of insurance.”

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