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PERFORMANCE OF SELECTED LIFE INSURANCE COMPANIES IN RURAL AND SOCIAL SECTORS – A STUDY

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ABSTRACT

The Indian life insurance sector is the tenth largest life insurance market in the world and the fifth largest in Asia in terms of total premiums. Life insurance is bought lesser in India by rural population. The tendency is to defer the purchase decision. The possibility of death is ignored by the rural people; however there is more possibility of such misfortune for people living in rural areas. The rural people never believe that they can succumb to destiny and they think they will live a long and healthy life. The rural population in India is without life insurance cover and this part of the population is also subject to weak social security and pension systems with hardly any old age income security. Every insurer has to follow the rules regarding rural and social obligations from time to time. The present study is to examine the business done in the rural sector and social sector by the life insurance companies namely LIC, SBI Life Insurance Co. Ltd and ICICI Pru Life Co. Ltd and also the population covered under insurance. Tests like correlation, chisquare, t-test and ANOVA have been applied. It has been found that the overall coverage of the population by the life insurance industry was skimpy. All the three companies have maintained the required percentage of policies to be issued in rural areas of their respective businesses during the study period as per IRDA norms but not even two percent of the rural

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population has been covered in any of the years under study on total. During some years the lives covered under social sector are less than the targets. The reasons might be due to lack and low awareness of the people about life insurance, low affordability and low purchasing power. These can be trounced by using social media, TV and radio, campaigns and developing trust among the rural people by providing quality service.

Key words: GDP, IRDA, Population, Rural Sector, Social Sector

Introduction: India is the second most populated country in the world with nearly a fifth of the world's population. According to the 2018 revision of the World Population, India population stood at 1358558898.

The Indian life insurance sector was the tenth largest life insurance market in the world and the fifth largest in Asia in terms of total premiums in 2016[1]. The Indian economy is one of the fastest growing large economies in the world, with a GDP growth rate of 7.3% [2](in real terms) in fiscal 2016 and a household savings rate of 16% in GNDI[3] and 2.9 percent of the house hold savings are in insurance. The economy of India is a developing mixed economy. It is the world's sixth largest economy by nominal GDP and the third largest by purchasing power parity (PPP). The country ranks 141 in per capital GDP (nominal) with $1723and 123 in per capita GDP (PPP) with $6616 as of 2016.

The Indian Economy is characterized by the existence of a vast majority of informal or unorganized labour employment. As per the Economic Survey, 93% of India's workforce includes the self employed and employed in unorganized sector. The Ministry of Labour, Government of India, has categorized the unorganized labour force under four groups in terms of Occupation, nature of employment, especially distressed categories and service categories. In the year 1993 a special committee called the Malhotra Committee observed that insurance formed a very meagre percentage of India's gross household savings. The numbers were exceptionally weak for people from the rural sector. Back then only 22% of the total population of the country had been insured. The committee recommended an absolutely smooth course of action to make the insurance scenario better. According to the committee, in the rural areas, post masters enjoyed a very trustworthy and friendly relationship with customers and hence this position could be successfully used in popularizing insurance in the nation.

The IRDAI (Obligations of Insurers to Rural and Social Sectors) Regulations, 2015 stipulated targets to be fulfilled by insurers on an annual basis. In terms of these regulations, insurers are required to cover year wise prescribed targets (i) in terms of percentage of lives under social sector out of total business; and (ii) in terms of percentage of policies to be underwritten from rural areas by life insurers and percentage of total gross premium income written direct by general insurers under rural obligations. The regulations require insurers to underwrite business in these segments based on the year of commencement of their operations and the applicable targets are linked to the year of operations of each insurer. Every insurer, who begins to carry on insurance business after the commencement of the Insurance Regulatory and Development Authority Act, 1999, for the purposes of sections 32B and 32C of the Insurance Act, 1938 as amended from time to time, shall ensure that it undertakes the following obligations, during the financial years indicated herein[4].

(A) Rural Sector

(a) In respect of a Life Insurer the following percentages of the total number of policies written in the respective years shown below:

Table 1: Percentage of number of policies in rural sector on the total business

Sr.No.	**Financial year from inception**	**Percentage of number of policies**
i	First year	7%
ii	Second year	9%
iii	Third year	12%
iv	Fourth year	14%
v	Fifth year	16%
vi	Sixth and seventh year	18%
vii	Eighth and ninth year	19%
viii	Tenth year and every year thereafter	20%

(B) Social Sector

Table 2: "Percentage of Social Sector lives" computed on the total business procured in the preceding financial year

Age of the Insurer in years	"Percentage of Social Sector lives" computed on the total business procured in the preceding financial year
1	0.5%
2	1%
3	1.5%
4	2%
5	2.5%
6	3%
7	3.5%
8	4%
9	4.5%
10 and above	5%

Rural sector

Any place as per the latest census which meets the following criteria:

(i) a population of less than five thousand;

(ii) a density of population of less than four hundred per square kilometer; and more than twenty five per cent of the male working population is engaged in agricultural pursuits.

Objectives:

1. To study the rural sector and social sector obligations of the life insurance sector in India set by IRDA.
2. To examine the business done in rural sector by the selected life insurance companies.
3. To examine the business done in social sector by the selected life insurance companies.

Methodology and Scope: The present study is on the total policies underwritten by the Indian life insurance sector in the country and the business obligation of selected life insurance companies in rural and social sectors. The study is through document survey and data is analysed by comparisons and percentages. Correlation, t-test, chisquare and ANOVA tests have been applied. The study is extended to the life insurance sector only and data is taken from LIC, SBI Life Insurance Co, Ltd and ICICI Pru Life websites for a period of ten years from 2008-2009 to 2017-18. The data regarding the total number of policies have been collected from IRDA annual reports. The study relies on secondary data so output is based on the prudentiality of the data published.

Null Hypotheses:

1. There is no relation between the population and number of policies underwritten by the life insurance industry.
2. There is no significant growth in the ratio of policies underwritten to the population.
3. There is no correlation between the rural population and number of rural sector policies underwritten.
4. There is no difference in the ratio of policies underwritten in rural sector to the total business underwritten by the companies in different years.
5. There is no difference in the percentage of rural sector policies underwritten to the rural population by the companies in different years.
6. There is no difference in the percentage of lives covered under social sector by the companies in different years.

Table 3: Population (as on 1st January) and Policies Underwritten

year	population (lakhs)	growth rate	policies (in lakhs)	growth rate	ratio of policies to population
2008	11927.446		508.75		
2009	12099.072	1.44	509.24	0.1	4.21
2010	12267.229	1.39	532.25	4.52	4.34
2011	12430.943	1.33	481.52	-9.53	3.87
2012	12590.759	1.29	441.93	-8.22	3.51

2013	12746.138	1.23	441.87	-0.01	3.47
2014	12899.617	1.20	408.72	-7.5	3.17
2015	13051.825	1.18	259.08	-36.61	1.99
2016	13203.695	1.16	267.39	3.2	2.03
2017	13353.560	1.14	264.56	-1.07	1.98
2018	13502.626	1.12	281.99	6.59	2.09
CAGR	**1.10**	**-2.57**	508.75	**52.58**	**-6.77**

Source: worldometers and IRDA annual reports

Result: The population in number increased year to year and the CAGR was 1.10. The growth rate of population was less than 1.5 percent throughout the study. It continuously declined from 1.44 in 2009 to 1.18 in 2015 and to 1.12 percent. The policies underwritten illustrate a declining trend in number; even it was as much as 36.61 percent during 2015. During 2017 there was moderate increase by 6.59 percent. The population covered under insurance was meager; less than five percent in any year of the study. The coverage (ratio of policies underwritten to the population) consistently declined from 4.34 percent in 2010 to 1.99 percent in 2015. During the last three years it had shown a mixed trend.

A) Conclusion for Hypothesis 1: Correlation test has been applied

Calculated value of correlation 0.108; pearson's critical values at df 8 (n-2 = 10-2 =8) are 0.632 and -0.632.

Since the calculated is less than table value, r is significant, null hypothesis is accepted and concluded that there is no significant relation between population and number of policies underwritten.

B) Conclusion for Hypothesis 2: Chisquare Test has been applied.

Calculated value = 0.334; Table (critical) value at df (n-1=10-1=9) at 0.05 level of significance $\chi_{0.05}$ = 16.919. Trend equation to find out expected values Y=a+bX

As the calculated value is less than the critical value, the null hypothesis is accepted and concluded that there is no significant growth in ratio of policies underwritten to the population.

Figure 1: Ratio of policies to population

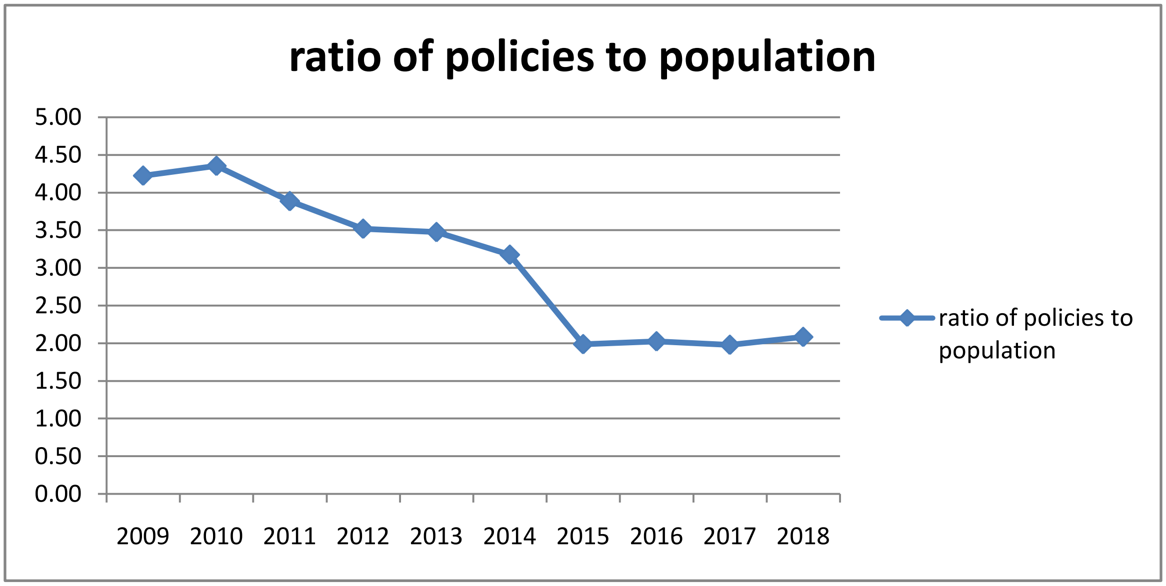

Table 4: Business in Rural Sector (number of policies)

YEAR	Rural Population (1)			No. of policies written in rural sector (2)				Percentage to total policies written by the respective companies			percentage of policies written to rural population				
	Number	percentage growth	Percentage on total population	LIC	SBI	ICICI	TOTAL	LIC	SBI	ICICI	LIC	SBI	ICICI	TOTAL	percentage growth
2007	826885768			9043416	258936	637867	9940219	21.67	27.97	22	1.094	0.031	0.077	1.202	
2008	835057833	0.988	69.02	8714662	254787	774725	9744174	24.28	27.17	29	1.044	0.031	0.093	1.167	-2.932
2009	842861327	0.934	68.71	10249643	378162	423670	11051475	26.39	28	24	1.216	0.045	0.050	1.311	12.366
2010	850238363	0.875	68.40	12124879	212031	352899	12689809	32.76	23	26	1.426	0.025	0.042	1.493	13.828
2011	857150489	0.813	68.08	11717769	190719	331133	12239621	32.8	22	32	1.367	0.022	0.039	1.428	-4.325
2012	863507600	0.742	67.75	9348789	207051	305909	9861749	25.44	23	31.9	1.083	0.024	0.035	1.142	-20.021
2013	869383944	0.681	67.40	8774513	243119	212650	9230282	25.45	23	27.3	1.009	0.028	0.024	1.062	-7.036
2014	874855900	0.629	67.03	5165265	251171	138442	5554878	25.65	22	21.7	0.590	0.029	0.016	0.635	-40.195
2015	879985657	0.586	66.65	5271937	305032	183695	5760664	25.7	24	31.6	0.599	0.035	0.021	0.655	3.100
2016	884784815	0.545	66.26	4510958	308985	163146	4983089	22.44	24.22	23.2	0.510	0.035	0.018	0.563	-13.967
2017	889215605	0.501	65.86	4770233	338242	177452	5285927	22.38	23.68	21.2	0.536	0.038	0.020	0.594	5.549
CAGR	**0.63**	**-6.57**		**-5.85**	**2.87**	**-13.70**	**-5.93**								

Source: 1. World Bank – IBRD-IDA 2. Companies Annual Reports

Result: The rural population grew in number by just 0.63 percent. The growth rate was negative 6.57 indicating the decreasing trend which means decreasing stay of people in rural areas. All the three insurance companies under study have met the targets set by IRDA in underwriting of policies in rural sector during any year of study. The business done in rural sector was above 20 percent of the total business done by the respective insurance companies. The number of policies underwritten taken for study is showing a declining trend in case of LIC (5.85 and ICICI (13.7), SBI noted a meager increase by 2.87 percent. The percentage of policies underwritten on aggregate to the rural population by the three companies was not even two percent in any year under study and moreover the business declined. LIC had underwritten above one percent during 2008 and 2013 but thereon declined to less than one percent. Both SBI and ICICI have not even covered one percent of the rural population in any of the year under study.

C) Conclusion for Hypothesis 3:

Calculated value of correlation -0.817

pearson's critical values at df 8 (n-2 = 10-2 =8) are 0.632 and -0.632.

Since the calculated value is more than table value, r is significant, the null hypothesis is rejected and concluded that there is significant relation between rural population and number of policies underwritten.

t-test: Critical value of $t_{0.05}$= 2.306 and -2.306 at df 8 (n-2=10-2=8)

Calculated value = - 4.003

As the calculated value of 't' is more than critical value, the null hypothesis is rejected and concluded that there is a significant relation between the rural population and number of policies underwritten.

D) Conclusion for Hypothesis 4: ANOVA test has been conducted and found that there is no difference in the ratio of policies underwritten in rural sector to the total business underwritten among the companies and during different years. (Calculated value is less than critical value).

sources of variation	**sum of squares**	**df (c-1) and (r-1)**	**mean squares**	**variance ratio F (calc value)**	**Critical value**	**Decision**
between companies	44.498	2	22.249	2.053	3.55	Null Hypothesis accepted
between years	122.65	9	13.628	1.257	2.46	Null Hypothesis accepted
residual	195.11	18	10.839			
total	362.258	29				

E) Conclusion for Hypothesis 5: ANOVA test has been conducted and found that there is significant difference in the percentage of policies underwritten to the rural population among the companies (calculated value is more than critical value) but there is no significant difference in the percentage of policies underwritten to the rural population during different years (calculated value is less than critical value).

sources of variation	**sum of squares**	**df (c-1) and (r-1)**	**mean squares**	**variance ratio F (calc value)**	**Critical value**	**Decision**
between companies	5.455	2	2.728	67.346	3.55	Null Hypothesis rejected
between years	0.394	9	0.044	1.081	2.46	Null Hypothesis accepted
residual	0.729	18	0.041			
total	6.578	29				

Table 5: Lives covered in Social Sector

year	**lives covered**			**Percentage on previous year business (total lives)**		
	LIC (in lakhs)	**SBI**	**ICICI**	**LIC**	**SBI**	**ICICI**
2008-09	110.65	555440	132625	17.20	48.87	12.43
2009-10	149.76	281856	175564	22.13	3.66	13.02
2010-11	132.75	70683	159427	17.11	4.38	7.72
2011-12	94.44	108829	155339	12.99	7.23	4.95
2012-13	132.24	68714	168593	17.97	5.70	9.11
2013-14	118.87	79463	171791	14.78	7.55	12.83
2014-15	205.97	65745	89711	25.25	6.80	9.84
2015-16	226.04	286124	65012	31.22	27.06	4.22
2016-17	229.65	589932	307340	27.62	6.42	17.22
2017-18	373.16	649599	403824	50.91	13.14	14.83
CAGR	**12.93**	**1.58**	**11.78**			

Source: Companies Annual Reports

Result: As per IRDA, the life insurance companies must have to cover prescribed number of lives under social sector. LIC has done the business. SBI couldn't do the business as per the norms during 2009-10 (4.5 percent) and 2010-11 (5 percent), but during all other years of study it fulfilled the norms. During the six years from 2009-10 to 2014-15 there was big drop in the coverage of lives. ICICI couldn't keep to the norms during 2011-12 and 2015-16 (5 percent). LIC covered 50.91 percent under social sector during 2017-18, SBI covered 27.06 percent during 2015-16 and 13.14 percent during 2017-18, ICICI covered 17.22 percent during 2016-17 and 14.83 percent during 2017-18.

F) Conclusion for Hypothesis 6: ANOVA test has been conducted and found that there is significant difference in the percentage of lives covered under social sector among the companies (calculated value is more than table value) but there is no significant difference in the percentage of lives covered under social sector during different years (calculated value is less than critical value).

sources of variation	**sum of squares**	**df (c-1) and (r-1)**	**mean squares**	**variance ratio F (calc value)**	**Critical value**	**Decision**
between companies	969.21	2	484.605	4.430	3.55	Null Hypothesis rejected
between years	1164.816	9	129.424	1.183	2.46	Null Hypothesis accepted
residual	1968.987	18	109.388			
total	4103.013	29				

Conclusion and Suggestions: The overall coverage of the population by insurance was skimpy. The low ratio of insurance coverage could be due to increasing cost of living, insurance provision to employees by employers, low eye to insurance, high premiums not affordable by middle class, giving false information by sales personnel, and above all these insurance is not a compulsion in India. The percentage of rural policies on rural population shows a clear picture of low explosion of life insurance in rural areas. Not even two percent of the rural population has been covered in any of the years. The reasons might be due to lack and low awareness of the people about life insurance, low affordability, low purchasing power, behavioural barriers and cultural factors, satisfaction of basic needs and family obligations. Even the companies might be thinking of transaction costs of reaching rural areas. These can be trounced by using social media, TV and radio, campaigns, providing quality service, appointing more number of agents from rural areas and providing training in local language, providing literature in local language. Developing trust among the rural people about the company is utmost important. Infrastructure development, conducting health camps and other social activities in rural India gives recognition to the insurers. Rural community insurance groups may be formed to educate rural people on the importance of life insurance. Distribution through doctors, postal agents, dwakra groups, gram panchayats and forums paves a better way towards rural insurance. And at last it the moral responsibility of the business people to have an eye on the rural sector as India can be seen in rural areas, its high and rich culture and heritage.

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