
GROWTH MOVEMENT OF POSTAL LIFE INSURANCE SERVICE IN INDIA DURING 2001-2002 TO 2015-2016

Dr. B. Angamuthu PhD

Assistant Professor in Commerce,
Kovai Kalaimagal College of Arts and Science, Coimbatore Tamilnadu, INDIA.
E-mail: mthuanga82@gmail.com

Abstract: Department of Posts (DoPs), with its vast network of post offices, continuously strives to be a customer service-centric organization. The post office as a one stop shop provides a range of utility services including life insurance service and offers convenience and affordability at the door steps of the common man. Over the years, financial inclusion has emerged as the main focus of the activities of the DoPs. Insurance service is one of such programme and it is widely accepted in the society. Currently, the DoPs has provide two different life insurance schemes to the people. Postal Life Insurance (PLI), introduced in 1884, is one of the oldest life insurance schemes for benefit of Government and semi-Government employees. Over, 110 years of its existence, India post extended its insurance service to the Rural areas in the name of Rural Postal Life Insurance (RPLI). This paper attempts to estimate trend in PLI and RPLI in India in terms of number of policies issued, its premium income and value of sum assured for the period of 2001-02 to 2015-16. In addition, comparative analysis has been done on the said parameters between PLI and RPLI. The results of the study revealed that the estimated Compound Growth Rate (CGR) over the years were positive among selected parameters in PLI but in RPLI, the premium income and sum assured value has positive growth over the study period.

Keywords: Department of Posts, Postal Life Insurance, Rural Postal Life Insurance

1 Introduction

Since 1854, the Department of Posts (DoPs) has proved to be one of the greatest institutions of the country which plays an important role in the socio-economic activity of the nation. The postal network of India touches the remotest corners of the country. India has the largest Postal Network in the world with 1,54,910 Post Offices of which 1,38,955 (89.70%) are in the rural areas. On an average, a Post Office serves an area of 21.22 Sq. Km. and a population of 8,364 people. In urban areas, a post office serves 26553 people and in rural areas, 6275 people. Now, India post provides variety of services across four major categories which are communication, post office saving schemes, banking and remittance, insurance. Among them, Insurance service has implemented 134 years ago in the year of 1884, the Postal Life Insurance (PLI) with the express approval of the Secretary of State (for India) to Her Majesty the Queen Empress of India. It was essentially a scheme of State Insurance mooted by the then Director General of Post Offices Mr. F.R. Hogg in 1881 as a welfare scheme for the benefit of Postal employees in 1884 and later extended to the employees of Telegraph department in

1888. In 1894, PLI extended insurance cover to female employees of Postal & Telegraph Department at a time when no other insurance company covered female lives. Over the years, PLI has grown substantially from a few hundred policies in 1884 to more than 46.8 lacs policies in 2017. It now covers employees of Central and State Governments, Central and State Public Sector Undertakings, Universities, Government aided Educational institutions, Nationalized Banks, Credit co-operative Societies, Local bodies, Deemed Universities, and Educational institutes accredited by recognized bodies such as National Assessment and Accreditation Council (NAAC), All India Council for Technical Education (AICTE), Medical Council of India (MCI) etc., joint ventures having a minimum of 10% stake of Central/State Governments/ PSUs and employees engaged/appointed on contract basis by Governments where the contract is extendable. Rural Postal Life Insurance (RPLI), introduced on March 24, 1995 on recommendations of Malhotra Committee, provides insurance cover to people residing in rural areas, especially weaker sections and women living in rural areas. Currently, both PLI and RPLI offers six

different schemes and all of them, have unique feature with low premium and High Bonus. The maximum sum assured limit of PLI Rs. 50 Lakhs and Rs. 10 Lakhs in RPLI.

Policies under PLI

- ❖ Whole Life Assurance (Suraksha)
- ❖ Convertible Whole Life Assurance (Suvidha).
- ❖ Endowment Assurance (Santosh)
- ❖ Anticipated Endowment Assurance for 15 and 20 years (Sumangal)
- ❖ Joint Life Endowment Assurance (Yuga Suraksha).
- ❖ Children Policy (Bal Jiwan Bima)

Policies under RPLI

- ❖ Whole Life Assurance (Gram Suraksha)
- ❖ Convertible Whole Life Assurance (Gram Suvidha)
- ❖ Endowment Assurance (Gram Santosh)
- ❖ Anticipated Endowment Assurance for 15 and 20 years (Gram Sumangal)
- ❖ 10 years RPLI (Gram Priya)
- ❖ Children Policy (Bal Jiwan Bima)

1.2 Research Gap and Research Questions

The existing research studies have been focused on the growth of PLI and RPLI with respect to value of business upto the reference period. Further, there is available for reasonable studies related to awareness and satisfaction level towards life insurance services provided by India Post. But, none of the studies involve to measuring the growth of new business service of PLI and RPLI. So, the researcher undertake to measure the growth movement of new life insurance business of India Post in terms of number of policies issued, its premium income and sum assured value. This study raised the following research questions.

- i) What is the growth rate of PLI and RPLI?
- ii) Which service has better performance?

1.3 Objectives of the Study

To analyze the growth rate of PLI and RPLI during the study period with respect to its selected parameters

To compare the actual performance between PLI and RPLI with respect to its selected parameters

1.4 Hypotheses of the study

- ❖ Ho1: There is no significant difference in the growth of PLI and RPLI during the study period.
- ❖ Ho2: There is no significant difference on actual performance between PLI and RPLI in terms of selected parameters during the study period.

II. REVIEW OF LITERATURES

Angamuthu (2014) in his empirical and analytical research analyze the growth of RPLI with respect to in force number of policies and sum assured value for the period 2001-2002 to 2009-2010. This study reported that the insurance policies in force under RPLI have grown at a CAGR of 31.16% and the sum assured have grown at a CAGR of 38.48% for the nine-year period. In addition, the growth of insurance policies and its sum assurance under PLI have grown at a CAGR of around 10% and 20% respectively (Angamuthu, 2015). Muthukrishnan (2013) in his study review the performance of PLI from 2007-08 to 2011-12 with respect to number of policies issued and its sum assured value. Singh and Bhagyashree (2016) studied the awareness of PLI, sources of awareness and benefits of PLI. This study concludes that the people are not completely aware about PLI. Area-wise comparison shows that the Urban areas have more awareness than rural areas. Insurance agents mostly influence to create awareness in both rural and urban areas. Saving and protection are the most concerned benefits under PLI. Angamuthu (2014) reported that nearly 2/3rd of the rural public are aware of RPLI and their awareness depends on education, occupation, family income and proportion of savings. Moreover, more than 4/5th of the policyholders are having higher satisfaction about PLI and then availability of loan facility to the scheme, procedure for settlement of claims, bonus offered by PLI is the major drivers for determine the satisfaction among policyholders (Angamuthu, 2015). Payal Dutta (2014) in his study analyze the customers satisfaction level and to problems faced by them. The study reported that respondents have satisfied with the service of PLI. In adequate fund, lack of awareness and interest are the major reasons for not investing in PLI. Vivek and Anurag (2012) in their study reported that most of the people willing to invest in public insurance company but most of them buy insurance from LIC than 20 private insurance companies

in India. Dhiraj Jain and Nikita Goyal (2012) in their study found that policyholders have low level of awareness towards rights and duties regarding life insurance. Statistical analysis reported that there exists a significant association between the demographic determinants and the awareness towards the rights and duties regarding life insurance. Gupta and Gupta (2012) in their study aims to find out the factors influencing the customers to invest in postal Life Insurance, LIC and Private Insurance and also to find out the reasons for choosing a particular service. Arulsuresh (2011) in his empirical study focused on policy holders' satisfaction towards various services of Life Insurance Corporation (LIC). This study used for 14 services and then grouped into two major services. They are, availability of services in LIC branch and grievance redressal mechanism.

III. RESEARCH METHODOLOGY

This descriptive research design has examined growth movements PLI and RPLI for the fifteen years study period from 2001-01 to 2015-16. The data which are collected and used for this research article are secondary in nature. The relevant and required data are collected from the secondary sources. They are Reports from Directorate of Postal Life Insurance, Strategic and various annual reports of India Post. The growth movements, difference on actual performance of PLI and RPLI were analyzed with the help of Year-on- Year growth rate, Exponential Compound Growth rate (CGR), Linear trend, Chi-square statistics (χ^2), Mean, Standard deviation (SD), t-test.

IV. ANALYSIS AND INTERPRETATIONS

4.1 CGR Estimation on PLI and RPLI

The result of growth estimation of number of policies issued, premium income and value of sum assured in PLI and RPLI during reference period is discussed below.

Growth movement of Policies issued in PLI: Table – 1 shows that the number of policies issued in PLI had increased to 1.98 lakhs in 2015-16 from 1.72 lakhs in 2001-02. The highest growth rate was 42.9 per cent in 2009-10 and the negative growth rate was 38.09 per cent in 2015-16. The CGR for the period 2001-02 to 2015-16 is 3.36 per cent which indicates a normal growth in the policies issued under PLI. It implies that the employed persons in Government sector has more concentrate for

their future life. It has been resulted that the growth level has reached at the maximum of 3.36 per cent in PLI.

Growth movement of Policies issued in RPLI: Table – 1 depicts that the number of policies issued in RPLI had decreased to 2.58 lakhs in 2015-16 from 3.68 lakhs in 2001-02. The highest growth rate was 334.8 per cent in 2009-10 and the negative growth rate was 46.7 per cent in 2013-14. The CGR for the period 2001-02 to 2015-16 is 0.001 per cent which indicates no growth in the policies issued under RPLI. Even though, the actual growth of RPLI has better performance than PLI in terms of policies issued during the study period.

Growth movement of Premium Income in PLI: It is observed from the table - 1 that premium income in PLI has constantly increasing trend. The premium income had increased to 6657.03 Crores in 2015-16 from Rs. 501.85 Crores in 2001-02. The highest growth rate was 29.7 per cent in 2009-10 and the lowest growth rate was 11.5 per cent in 2014-15. The CGR for the period 2001-02 to 2015-16 is 21.53 per cent which indicates good growth in the premium income under PLI.

Growth movement of Premium Income in RPLI: It obvious from the table – 1 that the premium income in RPLI has tremendous growth except 2010-11. The growth of premium income ranges from Rs. 94.71 Crores to Rs. 1012.17 Crores in 2015-16. The highest growth rate was 80.9 per cent in 2002-03 and the negative growth rate was 18.1 per cent in 2010-11. The CGR for the period 2001-02 to 2015-16 is 22.99 per cent which indicates good growth in the premium income under RPLI.

Growth movement of Value of Sum Assured in PLI: Table 1 shows that the value of sum assured under PLI had increased to Rs. 9644.98 Crores in 2015-16 from Rs. 1710.02 Crores in 2001-02. The highest growth rate was 82 per cent in 2009-10 and the negative growth rate was 32.4 per cent in 2015-16. The CGR for the period 2001-02 to 2015-16 is 17.12 per cent which indicates a normal growth in the policies issued under PLI.

Growth movement of Value of Sum Assured in RPLI: Table 1 shows that the value of sum assured under RPLI had increased to Rs. 2668.9 Crores in 2015-16 from Rs. 1696.85 Crores in 2001-02. The highest growth rate was 97.3 per cent in 2002-03 and the negative growth rate was 42.6 per cent in 2015-16. The CGR for the period 2001-02 to 2015-16 is 2.12 per cent which indicates a lesser growth in the sum assured value under PLI.

Table – 1: Performance of PLI and RPLI during 2001-02 to 2015-16												
Policies issued (in Nos.)				Premium income (Rs. in Crores)				Sum Assured (Rs. in Crores)				
Year	PLI	Growth (%)	RPLI	Growth (%)	PLI	Growth (%)	RPLI	Growth (%)	PLI	Growth (%)	RPLI	Growth (%)
2001-02	172163	-	368527	90.6	501.85	-	94.71	-	1710.02	-	1696.85	-
2002-03	212967	23.7	702542	54.2	590.84	17.7	171.36	80.9	2110.21	23.4	3347.94	97.3
2003-04	276880	30.0	1083152	23.3	698.17	18.2	245.32	43.2	2846.66	34.9	5949.97	77.7
2004-05	344403	24.4	1335847	8.1	904.58	29.6	380.87	55.3	3830.64	34.6	7207.96	21.1
2005-06	364564	5.9	1443818	-12.1	1078.66	19.2	475.09	24.7	4533.2	18.3	8822.86	22.4
2006-07	318058	-12.8	1268826	-5.4	1211.78	22.2	601.02	26.5	4146.67	-8.5	11116.59	26.0
2007-08	355700	11.8	1200582	-22.8	1480.34	25.7	664.7	10.6	5020.62	21.1	9644.3	-13.2
2008-09	417832	17.5	926371	334.8	1860.52	29.7	879.24	32.3	7345.56	46.3	8732.77	-9.5
2009-10	597234	-9.5	4027863	-9.7	2412.75	24.5	1111.48	-18.1	13366.22	1.1	13648.99	56.3
2010-11	540743	-10.8	3636063	-25.3	3003.33	22.6	1558.94	40.3	13519.25	-1.7	9610.94	-29.6
2011-12	482423	-5.9	2714856	-39.8	3681.03	23.8	1703.16	9.3	13288.16	10.6	9089	-18.4
2012-13	454053	-4.6	1634767	-46.7	4557.29	17.4	1960.25	15.1	14695.6	9.8	7413.18	-9.5
2013-14	433182	-25.2	871462	-45.2	5352.01	11.5	1983.32	1.2	16129.39	-11.5	6712.39	-30.7
2014-15	324022	-38.9	477360	-46.0	5967.46	11.6	2012.17	1.5	14276.92	-32.4	4652.36	-42.6
2015-16	198000		258000		6657.03		22.99		9644.98		2668.9	
CGR (%)	3.36		0.001		21.53		22.99		17.12		2.12	

Source: Secondary data

No. of Policies issued in PLI – χ^2 Test statistic

Ho: There is no significant difference in the growth of policies issued during the period of study

Ho1: There is a significant difference in the growth of policies issued during the period of study

Calculated Value of $\chi^2 = 1183.3^{}$**

Table value of χ^2 at 1% level 27.69 (d.f. 13)

The equation of straight line (Y) is $Y_c = 33.02 + -3.939x$

The χ^2 test statistic indicates that there was significant difference in the growth of policies issued in PLI during the period of study because the calculated value of χ^2 shows higher than the table value. So, the Ho is rejected and Ho1 has been accepted.

No. of Policies issued in RPLI – χ^2 Test statistic

Ho: There is no significant difference in the growth of policies issued during the period of study

Ho1: There is a significant difference in the growth of policies issued during the period of study

Calculated Value of $\chi^2 = 6648.797^{}$**

Table value of χ^2 at 1% level 27.69 (d.f. 13)

The equation of straight line (Y) is $Y_c = 77.03 + -7.814x$

The χ^2 test statistic indicates that there was significant difference in the growth of policies issued in RPLI during the study period because the calculated value of χ^2 shows higher than the table value. So, the Ho is rejected and Ho1 has been accepted.

Premium Income in PLI (Rs. in Crores) – χ^2 Test statistic

Ho: There is no significant difference in the growth of premium income during the study period

Ho1: There is a significant difference in the growth of premium income during the study period

Calculated Value of $\chi^2 = 21.977$

Table value of χ^2 at 1% level 27.69 (d.f. 13)

The equation of straight line (Y) is $Y_c = 23.20 + -0.370x$

The calculated value of χ^2 shows lower than the table value. So, the Ho is accepted and Ho1 is rejected. It is concluded that there is no significant difference in the growth of premium income in PLI during the study period.

Premium Income in PLI (Rs. in Crores) – χ^2 Test statistic

Ho: There is no significant difference in the growth of premium income during the study period

Ho1: There is a significant difference in the growth of premium income during the study period

Calculated Value of $\chi^2 = 189.069^{}$**

Table value of χ^2 at 1% level 27.69 (d.f. 13)

The equation of straight line (Y) is $Y_c = 59.23 + -4.308x$

The calculated value of χ^2 shows higher than the table value. Therefore, the Ho is rejected and Ho1 is accepted. It is reported that there was significant difference in the growth of premium income in RPLI during the study period.

Value of sum Assured in PLI (Rs. in Crores) – χ^2 Test statistic

Ho: There is no significant difference in the growth of value of sum assured during the study period

Ho1: There is a significant difference in the growth of value of sum assured during the study period

Calculated Value of $\chi^2 = 296.421^{}$**

Table value of χ^2 at 1% level 27.69 (d.f. 13)

The equation of straight line (Y) is $Y_c = 41.06 + -3.305x$

The χ^2 test statistic indicates that there was significant difference in the growth of value of sum assured in PLI during the study period because the calculated value of χ^2 shows higher than the table value. So, the Ho is rejected and Ho1 has been accepted.

Value of sum Assured in RPLI (Rs. in Crores) – χ^2 Test statistic

Ho: There is no significant difference in the growth of value of sum assured during the study period

Ho1: There is a significant difference in the growth of value of sum assured during the study period

Calculated Value of $\chi^2 = 198.254^{}$**

Table value of χ^2 at 1% level 27.69 (d.f. 13)

The equation of straight line (Y) is $Y_c = 71.40 + -8.171x$

4.2 Difference on Actual Performance of PLI and RPLI

Ho: There is no significant difference on actual performance between PLI and RPLI in terms of selected parameters during the study period.

Table – 2: Difference on Performance of PLI and RPLI							
Parameter	Category	N	Mean	Std. Deviation	t-value	df	Result
No. of Policies	PLI	15	366148	123723	3.725*	28	Significant
	RPLI	15	1463336	1133967	*		
Premium Income (Rs. in Crores)	PLI	15	2663.84	2095.60	2.893*	28	Significant
	RPLI	15	1013.26	700.95	*		
Value of Sum assured (Rs. in Crores)	PLI	15	8430.94	5290.33	0.670 ^{NS}	28	Not Significant
	RPLI	15	7354.33	3283.08			
Source:		*Sig. at 5% level; **Sig. at 1% level; NS Not Significant at 5% level					

Table -2 shows that the calculated ‘t’ value between PLI and RPLI is statistically significant at 1% level in terms of number of policies issued and its generation of premium income. Hence, null hypothesis is rejected and it can be concluded that there exists a significant difference between PLI and RPLI in terms of said parameters during the study period. Further, it reveals that the average performance in terms of policies issued during the study period in RPLI is much higher than the PLI but in terms of premium income average performance of PLI is much higher than the RPLI. On the other hand, the calculated ‘t’ value between PLI and RPLI is statistically not significant at 5% level in terms of sum assured value. Hence, null hypothesis is accepted and it can be concluded that there is no significant difference between PLI and RPLI in terms of sum assured value during the study period.

V. MAJOR FINDINGS AND CONCLUSION

- ❖ RPLI has better performance than PLI in terms of policies issued during the study period
- ❖ PLI has better performance than RPLI in generation of premium income during the study period

- ❖ PLI has better performance than RPLI in terms on value of sum assured for the study period 2001-02 and 2010-11 to 2015-16
- ❖ RPLI has better performance than PLI in terms on value of sum assured for the study period 2002-03 to 2009-10.
- ❖ There was significant difference on the growth of policies issued, premium income and value of sum assured in PLI during the study period.
- ❖ There exists significant difference on the growth of policies issued and value of sum assured in RPLI for the study period.
- ❖ There is no significant difference in the on the growth of premium income in RPLI for the study period.

Empowerment requires not only generation of income but also protecting the income through effective risk management. Insurance is one of the components of financial inclusion that can empower the vulnerable group. This study concluded that both PLI and RPLI had constantly decreased trend than its respective previous year in terms of policies issued and its value of sum assured since 2011-2012. So, DoPs should be asked

to taken steps to bring all the households under the protection of PLI/RPLI schemes. Some of the suggestions are as follows

- ❖ The DoPs Should be asked to conduct Regular advertising campaign through Mobile vans, Television and Radio, Print Media, Mobile phones etc.,
- ❖ Conduct seminars and conferences tie-up with school/higher educational institutions regarding benefits PLI/RPLI.
- ❖ Marketing system of PLI and RPLI schemes may be change. It may appointment of agents like individual persons, Self-Help Group members, Anganwadi employees.
- ❖ Provisions should formulate to bring members of SHGs under the exclusive scheme of postal life insurance service.

REFERENCES

1. Angamuthu, B., (2014). Rural Postal Life Insurance: Its Growth and Public Awareness. *Tatva – The Journal of Management Scholars*, Vol.11, pp. 25-33
2. Angamuthu, B., (2015). Rural Postal Life Insurance: Policyholders' Satisfaction and Factors responsible for Investing Behaviour. *The Eternal – International Journal of Research in Management Studies*, Vol.2(1), pp.22-34
3. Arulsuresh, J., (2011). Empirical study on Satisfaction of the Policyholders Towards the Services Provided by LIC of India in Madurai Division. “*Zenith - International Journal of Multidisciplinary Research*, Vol.1(8), pp. 552-557.
4. Gupta, M.K., and Gupta, N., (2012). An empirical study of postal life insurance in reference to LIC and private insurance in NCR. *IMS Manthan*, Vol. 7(1).
5. Manoj Sinha, Rural People To Get Affordable Life Insurance Services, Available at <http://businessworld.in/article/Rural-People-To-Get-Affordable-Life-Insurance-Services-Manoj-Sinha/13-10-2017-128541/>, Access on 23-2-2018
6. Muthukrishnan, B., (2013). An Outlook of Postal Life Insurance in the Current
7. ERA. *Indian Journal of Applied Research*, Vol.3(5), pp. 434-435.
8. Singh, P.K., and Bhagyashree, T., (2016). Spread of Postal Life Insurance. “*Commonwealth Journal of Commerce & Management Research*”, Vol.3(1), pp. 20-36.
9. Vivek, D., and Anurag, M., (2012). Study of Consumer's Perception on Life Insurance Policies in Reliance Life Insurance Company Ltd. Report submitted to Guru Nanak Institute Of Management, Punjab.
10. Dhiraj Jain and Nikita Goyal (2012). An Empirical study of the Level of Awareness towards various Rights and Duties among the Insured Households in Rajasthan, India. “*International Refereed Research Journal*, Vol.3(2), pp. 40-49
11. Payal Dutta, (2014). A study on customer preferences and level of satisfaction of postal life insurance. “*Tactful - International Journal of Management Research Journal*”, Vol.2(11), pp. 1-4.

<http://www.chennaipost.gov.in/pli.aspx#rplischemes>

<http://timesofindia.indiatimes.com/city/allahabad/Postal-Life-Insurance-day-celebrated/articleshow/24219876.cms>

<https://www.bankbazaar.com/life-insurance/rural-postal-life-insurance.html>

<https://in.finance.yahoo.com/news/postal-life-insurance-life-insurance-053010036.html>

<https://data.gov.in/catalog/growth-postal-life-insurance-and-rural-postal-life-insurance>

<https://www.bankbazaar.com/rural-postal-life-insurance/bal-jeevan-bima-plan.html>

<http://www.examinationtoday.com/role-of-post-offices-in-rural-development/>

<http://doppli.nic.in/gpriya.htm> and other websites

