Performance of Life Insurance Corporation of India – Part 1

I concluded my last article on "Disinvestment of LIC" with the statement that, "In my next article, I will trace the Performance of the Corporation over the years and the strategy to be adopted in future". Judging the performance of a life insurance organisation over a period of time is not an easy task. Many aspects of the business have to be analysed. For example, New Business performance, Control on Expenses, Lapse experience, Claim experience, Agency Organisation and Insurance Penetration. The major constraint which one will face in doing this analysis is availability of data. The organisation may have all the data required for such an analysis. But, what is available in the public domain will be very limited and I have conducted this analysis with the limited data available in the public domain.

In this article, I have taken up New Business performance and Lapse experience and have also given Seven Suggestions, in the last 13 pages, for improving New Business performance and reducing lapses. In the next article, Operational Expenses will be taken up.

A) New Business Performance

A1) Let us look at the New Business performance of the LIC of India, over a period of three decades. Table – 1 on the following page gives the total number of policies in force (including paid-up policies) as at the beginning of each financial year, the number of new policies issued during each year and the growth rates of each.

TABLE – 1 INDIVIDUAL ASSURANCES
Rate of Growth of Number of Policies in force (including paid-up policies) and
Number of new Policies issued (All Figures in Millions)

Financial year	No. of Policies in	Rate of Growth	No. of New	Rate of Growth
	force at the beginning of the year	of No. of Policies in force	policies issued during the year	of No. of New Policies issued
1988 – 89	32.3	1 oncies in force	6.0	1 Olicies Issueu
1989 – 90	36.1	11.8%	7.4	23.3%
1990 – 91	40.3	11.6%	8.6	16.2%
1991 – 92	45.5	12.9%	9.2	7.0%
1992 – 93	50.9	11.9%	10.0	8.7%
1332 – 33	50.5	11.570	10.0	0.7 70
1993 – 94	56.6	11.2%	10.7	7.0%
1994 – 95	60.8	7.4%	10.9	1.9%
1995 – 96	65.5	7.7%	11.0	0.9%
1996 – 97	70.9	8.2%	12.3	11.8%
1997 – 98	77.7	9.6%	13.3	8.1%
1998 – 99	84.9	9.3%	14.8	11.3%
1999 – 00	91.6	7.9%	17.0	14.9%
2000 – 01	101.3	10.6%	19.7	15.9%
2001 – 02	113.0	11.5%	22.5	14.2%
2002 – 03	125.8	11.3%	24.3	8.0%
2003 – 04	138.8	10.3%	26.5	9.1%
2004 – 05	153.8	10.9%	21.8	-17.7%
2005 – 06	163.0	5.9%	29.3	34.4%
2006 – 07	179.6	10.2%	20.9	-28.7%
2007 – 08	189.4	5.5%	18.0	-13.9%
2008 – 09	192.4	1.6%	29.3	62.8%
2009 – 10	210.2	9.3%	30.6	4.4%
2010 – 11	226.1	7.6%	31.4	2.6%
2011 – 12	240.4	6.3%	34.6	10.2%
2012 – 13	255.8	6.4%	36.3	4.9%
2013 – 14	270.3	5.7%	34.2	-5.8%
2014 – 15	279.5	3.4%	19.9	-41.8%
2015 – 16	277.6	-0.7%	20.2	1.5%
2016 – 17	279.1	0.5%	19.6	-3.0%
2017 – 18	280.7	0.6%	20.7	5.6%
2018 – 19	282.2	0.5%	21.4	3.4%

- A2) Figures in the above TABLE have been taken from the Annual Reports of the Life Insurance Corporation of India. I do not have the Reports prior to 1988 89. I do not also have the latest Report, for the year 2018 19. The number of new policies issued in 2018 19 has been taken from Chairman's speech.
- **A3)** Only the total number of policies is available in these Reports and the split-up into Single Premium and Regular Premium policies is not available. Better analysis could be done if separate figures of these two classes of policies are also available.
- A4) The second column gives the number of policies in force (including paid-up policies) as at the beginning of a year. This is the same as the number of policies in force as at the end of the previous year.

The total number of policies in force as at the beginning of the financial year 2015 - 16 is less than that at the beginning of the previous year, viz. 2014 - 15. That is, the total number of policies has recorded a negative growth for the first time during the financial year 2014 - 15.

- A5) The number of policies as at the beginning of a financial year
- = Number of policies as at the beginning of the previous financial year
- + (Number of New policies issued + Number of policies revived) during the previous year
- (Number of maturity claims + Number of death claims + Number of policies surrendered + Number of policies that had lapsed without acquiring paid-up value) during the previous year

(A policy that lapses during a year and revived during the same year will be counted **neither** under "policies lapsing during the year **nor** under "policies revived during the year").

That is,

The Number of policies as at the beginning of a financial year will be,

- = Number of policies as at the beginning of previous financial year
- + (Number of Entries Number of Exits) during the previous year

 If there is a drop in the number of Entries or an increase in the number of Exits during the previous year, the number of policies as at the beginning of a year <u>may</u> become less than the number as at the beginning of the previous year.

A6) As the total number of policies in force increases, the number of maturity claims, death claims and exits by surrender will also increase correspondingly. Even if the lapse percentage remains constant, the number of lapses will increase. A stage will be reached when the total number of Entries will be equal to the total number of Exits. When this stage is reached, the number of policies at the end of a year will be equal to the number at the beginning of the year. This stage is known as the Stationary Point. It is an algebraical phenomenon, and every life insurance organisation will reach this stage at some point of time. It appears that the LIC of India is now inching towards this stage.

If the insurance sector had not been opened to private players, the number of new policies procured in a year would have been higher and it would have taken atleast another decade to reach the stationary point.

A7) From 2008 - 09 to 2013 - 14, the number of new policies issued had been quite high; either just less than 30 million or above 30 million per year. There is a sudden, more than 40%, drop in 2014 - 15 and the number of new policies issued has come down to 19.9 million and is hovering around 20 million afterwards. This seems to be the main reason for the total number of policies as at the beginning of 2015 - 16, being less than that at the beginning of 2014 - 2015

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- **A8)** What is the reason behind this sudden drop in new business? In the year 2013, the Regulator (IRDAI Insurance Regulatory and Development Authority of India) imposed many restrictive conditions that were to be satisfied by all plans of life insurance. This Regulation invalidated almost all the existing plans of life insurance and the companies had to design new plans or modify the existing plans, at a short notice, before 1st October 2013, and also give necessary training to the field force. This Regulation reminded one of the actions of Mohd. bin Tughlaq, the Sultan of Delhi from 1325 to 1351. The dozens of plans of insurance that the LIC was having in its portfolio had to be discarded and replaced by a few plans designed at short notice. The agents, who were till then able to present to their customers a broad spectrum of products to choose from, suddenly found that they only have a very few products to offer. This led to a sharp decline in the number of policies sold.
- A9) Many may feel that the LIC has suffered a severe setback, with the number of new policies issued per year coming down from around 35 million to about 20 million per year. In my opinion however, the position of LIC has improved during the last four years. How? One may wonder. Consider the data below (TABLE 2A, TABLE 2B, TABLE-2C, TABLE 2D), pertaining to new policies for the two years 2013 14 and 2017 2018.

TABLE – 2A Individual Assurance (all figures in Millions)

Year	Number of Policies	Sum Assured (in Rs. Millions)	Annual Premium Receivable
2013 – 2014	(in Millions) 34.2	5,570,917	(in Rs. Millions) 291,996
2017 – 2018	20.7	5,319,921	275,798

TABLE – 2B General Annuities

Year	Number of Policies	
2013 – 2014	24,007	
2017 – 2018	363,756	

TABLE - 2C Pensions

Year	Number of	Notional Cash	Annual Premium
	Policies	Option	Receivable
		(in Rs. Millions)	(in Rs. Millions)
2013 – 2014	14,933	6,010.8	323.1
2017 – 2018	10,635	5,621.0	299.5

TABLE 2D Non-Linked Health (Jeevan Arogya)

Year	Number of	Major Surgical	Annual Premium
	Policies	Benefit	Receivable
		(in Rs. Millions)	(in Rs. Millions)
2013 – 2014	233,698	40,705.9	844.1
2017 – 2018	200,214	149,596.5	1,004.3

A10) It can be seen from TABLE-2A that, though the number of policies has decreased by about 40%, the Sum Assured and Annual Premium are almost the same as they were in 2013 – 14. It means that the Average Sum Assured and Average Annual Premium per policy have increased substantially, which is a healthy sign and would lead to significant increase in the emergence of surplus in future. It also indicates that the Corporation's habit of giving undue importance to "number of policies" while judging the performance of Branches, which led to splitting of a

proposal into multiple policies of smaller sums assured, is giving place to aiming for higher average sum assured. *This is a healthy sign*

A11) We have seen the rate of growth of number of new policies issued. Let us next see the rate of growth of first year premium income, which is given in TABLE – 3 on the following page.

A12) This data was taken from the Annual Reports of LIC. The figures for the year 2018 - 19 were taken from the web-site of Life Insurance Council, since I do not have the latest Annual Report of the LIC. During this year, the first year premium income under group policies was about Rs.87,000 crores. Fluctuations in single Premium income need not be a cause for concern. It depends more upon the single premium plans introduced or withdrawn in a year. From 2004 - 2005 to 2010 - 2011, unit linked plans were being given more importance by the marketing force. So, there was corresponding drop in the new premium income under traditional assurance plans. One exception was in the year 2008 – 2009, when the sales of unit linked policies dropped, with a corresponding surge in the single premium under traditional assurance policies. In the years 2006 – 2007 and 2007 – 2008, single premium and non-single first year premium under Linked Plans surged to about Rs.32,000 crores (320 billion) and Rs.40,000 crores (400 billion) respectively and so, there was a drop in the first year premium income under traditional assurance policies. In the year 2014 – 2015, because of drastic changes in the Product Regulations, there was a big drop in the first year premium income.

TABLE - 3 INDIVIDUAL ASSURANCES

Rate of Growth of First Year Premium Income (Single Premium and Regular Premium (All Figures in crores – one crore = 10 million)

Premium (All Figures in crores – one crore = 10 million)					
Financial year	Single Premium	Rate of Growth	First Year Regular	Rate of Growth	
	Income (in Rs. Crores)	of Single Premium	Premium Income (in Rs. Crores)	of Regular Premium	
1988 – 89	4	1 Telliani	716	Tremium	
1989 – 90	6		981	37.0%	
1990 – 91	3		1,196	21.9%	
1991 – 92	6		1,405	17.5%	
1992 – 93	4		1,616	15.0%	
1993 – 94	4		1,900	17.6%	
1994 – 95	17		2,056	8.2%	
1995 – 96	7		2,332	13.4%	
1996 – 97	8		2,813	20.6%	
1997 – 98	19		3,295	17.1%	
1998 – 99	194		3,967	21.0%	
1999 – 00	422	117.5%	4,956	24.3%	
2000 – 01	1,539	264.7%	6,591	33.0%	
2001 – 02	5,430	252.8%	9,966	51.2%	
2002 – 03	3,016	(-44.5%)	10,216	2.5%	
2003 – 04	862	(-71.4%)	10,885	6.5%	
2004 – 05	684	(-20.6%)	10,779	(-1.0%)	
2005 – 06	1,341	96.1%	12,806	18.8%	
2006 – 07	946	(-29.5%)	11,720	(-8.5%)	
2007 – 08	264	(-72.1%)	9,540	(-18.6%)	
2008 – 09	11,336	4193.9%	13,792	44.6%	
2009 – 10	2,510	(-77.9%)	18,934	37.3%	
2010 – 11	3,041	21.2%	21,756	14.9%	
2011 – 12	8,709	186.4%	28,681	31.8%	
2012 – 13	12,714	46.0%	27,906	(-2.7%)	
2013 – 14	13,548	6.6%	27,010	(-3.2%)	
2014 – 15	13,452	(-0.7%)	19,432	(-28.1%)	
2015 – 16	12,767	(-5.1%)	20,060	3.2%	
2016 – 17	23,498	84.1%	22,176	10.5%	
2017 – 18	26,655	13.4%	25,098	13.2%	
2018 – 19	24,394	(-8.5%)	26,619	6.1%	

A13) Till the opening of the insurance sector to private players and even two years after its opening, LIC's annual rate of growth of First Year

Premium Income has been quite impressive. There are ups and downs from the year 2002 – 03 onwards. Till the opening of the insurance sector, the sale of single premium policies was negligible. After the opening of the sector, significant proportion of First Year Premium Income is coming through Single Premiums.

It appears that, the Corporation is able to show impressive figures of market share of first year premium income only through single Premium policies. This has got some disadvantage, as will be seen in paragraph (C5)

A14) TABLE – 4 on the following page gives the market share of LIC in First Year Premium Income. For this, I got the necessary data from the web-sites of IRDA and Life Insurance Council.

The IRDA was also kind enough to give me some items of information at my request and I thank them for the same.

A15) In the web-site of the IRDA, Linked and Non-Linked premiums are available separately. But, Group and Individual Premium figures are not given separately. In the Life Insurance Council's web-site, Linked and Non-Linked premiums are not available separately. But, Group and Individual Premium figures have been separated. TABLE – 4 in the previous page gives "First Year Premium Income" (Linked). It does not say whether it pertains only to Assurances or to both Assurances and Annuities and whether it includes also Premium under group schemes. It has been assumed that the data in TABLE – 4 pertains to Assurances and Annuities as well as premium income under group schemes, in respect of Linked policies. Similarly data in TABLE – 5 pertains to Non-Linked policies.

TABLE - 4
First Year Premium Income (Linked)
All Amounts in Rs.Crores (one crore = 10 million)

All Allounts in Rs. Crores (one crore = 10 illillion)					
Linked P	Premiums	2014 – 15	2015 – 16	2016 – 17	2017 – 18
	Non-Single	1,845.4	1,882.1	1,899.7	2,719.9
HDFC	Single	530.7	954.9	1,164.8	1,173.9
	Total FYP	2,376.1	2,837.0	3,064.5	3,893.8
	Non-Single	3,884.9	4,116.4	5,482.8	6,287.2
ICICI	Single	480.3	1,450.4	739.5	746.1
	Total FYP	4,365.2	5,566.8	6,222.3	7,033.3
	Non-Single	1,379.8	2,594.7	4,673.7	5,585.1
SBI	Single	555.3	638.7	449.3	547.0
	Total FYP	1,935.1	3,233.4	5,123.0	6,132.1
	Nava Olasada	10 EG1 E	12 272 1	17 170 1	24.040.6
All Private	Non-Single	10,564.5	13,272.1	17,470.4	21,010.6
Insurers	Single	2,706.0	4,294.4	3,711.9	5,068.0
	Total FYP	13,270.5	17,566.5	21,182.3	26,078.6
	Non Cinale	0.7	29.1	21.1	59.7
LIC	Non-Single				
of	Single	1.3	1.3	1.2	1.3
India	Total FYP	2.0	30.4	22.3	61.0
Market Share of LIC	Total FYP	NEGLIGIBLE			

TABLE – 5
First Year Premium Income (Non-Linked)
All Amounts in Rs.Crores (one crore = 10 million)

Non-Linked	Premiums	2014 – 15	2015 – 16	2016 – 17	2017 – 18
	Non-Single	1,082.5	1,414.5	1,673.1	2,018.6
HDFC	Single	2,033.5	2,235.9	3,958.7	5,437.3
1121 0	Total FYP	3,116.0	3,650.4	5,631.8	7,455.9
	Non-Single	688.3	808.0	861.9	1,069.0
ICICI	Single	421.2	3,694.2	779.1	1,109.5
	Total FYP	1,109.5	4,502.8	1,641.0	2,178.5
	Non-Single	1,950.9	2,035.9	1,533.5	2,554.2
SBI	Single	1,643.2	1,837.3	3,487.4	2,279.8
	Total FYP	3,594.1	3,873.2	5,020.9	4,834.0
All Private	Non-Single Single	13,337.2 8,214.1	13,780.9 9,527.1	15,579.1 13,858.0	16,570.8 16,832.9
Insurers	Total FYP	21,551.3	23,308.0	29,437.1	33,403.7
LIC	Non-Single	23,111.5	23,800.2	26,279.9	28,086.7
of	Single	55,394.2	74,060.9	98,281.1	106,524.0
India	Total FYP	78,505.7	97,861.1	124,561.0	134,610.7
Market Share of LIC	Total FYP	78.5%	80.8%	80.9%	80.1%

A16) In the website of Life Insurance Council, first year premiums for the year 2018 – 19 are available. But, the break-up of the premiums into Linked and Non-Linked are not available. So, the year 2018 – 19 could not be included in TABLEs 4 and 5. But, it could be included when the total premium income is considered.

TABLE – 6
Total First Year Premium Income (all amounts in Rs.crores)

	2014 – 15	2015 – 16	2016 – 17	2017 – 18	2018 – 19
	2014 10	2010 10	2010 17	2017 - 10	2010 13
HDFC	5,494.1	6487.4	8,696.3	11,349.7	14,971.5
ICICI	5,474.7	10,069.6	7,863.3	9,211.8	10,251.8
SBI Life	5,529.2	7,106.6	10,143.9	10,966.1	13,792.0
All Private Insurers	34,821.8	40,874.5	50,619.4	59,482.3	72,481.2
LIC of India	78,508.7	97,891.5	124,583.0	134,671.7	142,191.7
For the Industry	113,330.5	138,766.0	175,202.4	194,154.0	214,672.9
Rate of Growth		22.4%	26.3%	10.8%	10.6%

TABLE – 7
Market Share of Total First Year Premium Income

	2014 – 15	2015 – 16	2016 – 17	2017 – 18	2018 – 19
HDFC	4.8%	4.7%	5.0%	5.8%	7.0%
ICICI	4.8%	7.3%	4.5%	4.7%	4.8%
SBI Life	4.9%	5.1%	5.8%	5.6%	6.4%
All Private					
Insurers	30.7%	29.5%	28.9%	30.6%	33.8%
LIC of India	69.3%	70.5%	71.1%	69.4%	66.2%

A17) TABLE – 6 gives total First Year Premium incomes of the three leading Private Insurers, Combined Total First Year Premium Income of all Private Insurers and that of LIC of India. TABLE – 7 gives the Market Share of each of these five entities for the five financial years 2014 – 15 to 2018 – 19.

It can be seen that the market share of LIC of India has decreased during the last two years.

A18) It can be seen from TABLE – 4 that the LIC is virtually not doing any Linked business. In fact, its agents are averse to marketing any plan of insurance in which the amount payable on maturity is not guaranteed. So, the market share of the LIC in respect of first year premium under Linked plans can be taken as 0%. Its corresponding market share under Non-Linked plans is about 80%. Its market share in respect of first year premium under both Linked and Non-Linked Plans put together is about 70%. However, its market share came down to 66.2% in 2018 – 19.

A19) The First Year Premium Income given in TABLE – 6 is inclusive of the premium income under Group Schemes. Let us now consider the first year premium income under Group Schemes alone. This is given in TABLE – 8. In group business also the market share of the LIC had been above 80% and has reduced to 77% in 2018 – 19.. The LIC is just ignoring the Linked business. In the non-linked business and also the group business, its market shares are quite high.

A20) TABLE – 4 gives LIC's market share in first year premium income (Linked – Individual and Group), TABLE – 5 gives LIC's market share in first year premium (Non-Linked – Individual and Group) and TABLE – 7 gives the market share of total first year premium income of (i) the three leading companies in the private sector (ii) all private sector insurers put together and (iii) LIC of India.

TABLE – 8
First Year Premium Income (Linked & Non-Linked) under Group Schemes
All Amounts in Rs.Crores (one crore = 10 million)

All Allouits in its.orores (one crore = 10 million)					
Linked &	Non-Linked Premiums	2016 – 17	2017 – 18	2018 – 19	
	Single Premium	4,335.7	5,289.5	6,968.1	
HDFC	Non-Single & Yearly Renewable Premiums	84.2	116.5	338.4	
	Total FYP	4,419.9	5,406.0	7,306.5	
	Single Premium	158.5	207.4	1,334.0	
ICICI	Non-Single & Yearly Renewable Premiums	640.7	508.7	777.9	
	Total FYP	799.2	716.1	2,111.9	
	Single Premium	3,345.5	2,139.4	3,977.6	
SBI	Non-Single & Yearly Renewable Premiums	336.6	419.9	178.3	
	Total FYP	3,692.1	2,559.3	4,155.9	
All Private	Single Premium	12,546.8	15,276.3	21,881.3	
Insurers	Non-Single & Yearly Renewable Premiums	5,487.5	3,672.4	3,928.8	
	Total FYP	18,034.3	18,948.7	25,810.1	
LIC	Single Premium	74,763.6	79,851.0	86,527.4	
of India	Non-Single & Yearly Renewable Premiums	4,041.8	2,956.8	428.1	
	Total FYP	78,805.4	82,607.8	86,955.5	
Market Share of LIC	Total FYP	81.4%	81.3%	77.1%	

A21) For the year 2017 – 18, the market shares in the first year premium income (Individual Linked, Individual Non-Linked and Group), of the three leading companies in the private sector are given in TABLE – 9. For the year 2018 – 19, break-up into Linked and Non-Linked is not available. The ICICI and SBI Life appear to be concentrating more on Linked business and the performance of HDFC appears to be more balanced.

TABLE - 9

Market Shares of the three leading private insurers in the year 2017 - 2018

Companies	Individual Non-Linked	individual Linked	Group Business
Companies	Business	Business	Group Buomicoo
HDFC	4.4%	14.9%	5.3%
ICICI	1.3%	26.9%	0.7%
SBI Life	2.9%	23.5%	2.5%

In respect of Group Business, the market shares of the above three companies during the year 2018 – 19, are,

HDFC	6.5%	ICICI	1.9%	SBI Life	3.7%	

These companies are thus showing improvement under group business.

TABLE – 10
First Year Premium Income (Individual Linked and Non-Linked) for the Year 2018 – 19 All figures in Rs.Crores

	Private		
	Insurers	LIC	Total
Individual Single			
Premium	7,273.8	24,393.6	31,667.4
Individual Non-Single			
Premium	39,397.3	26,618.6	66,015.9
Group Premium	25,810.1	91,179.5	116,989.6
Total	72,481.2	142,191.7	214,672.9
Market Share	33.8%	66.2%	100%

A22) TABLE – 10 above gives the break-up of premium income (Individual – Linked and Non-Linked) of Private Insurers and LIC for the year 2018 – 19. Since this has been taken from the web-site of Life Insurance Council, the Linked and Non-Linked premium incomes are not available separately.

A23) As per the report in Business Standard, during the first half of the current financial year 2019 – 20,

- First year premium income of LIC was Rs.89,980.22 crores, an increase of 42% over the corresponding first half of the previous year 2018 19.
- First year premium income of private sector insurers was Rs.35,777.89
 crore, an increase of 21% over the corresponding first half of the previous year 2018 19.

• The market share of LIC improved to 71.6%

In absolute terms, the life insurance industry earned new business premiums to the tune of Rs 1.25 trillion in first half of 2019 – 20, compared to Rs.93,078 crore in the same period a year ago. Of this, LIC alone amassed Rs 89,980 crore while private insurers accumulated new business premiums of Rs 35,778 crore.

It appears that the Economy has started Recovering.

- **A24)** It appears that, LIC depends more on the Single Premium for improvements in its market share and the Private sector insurers depend more on the Linked Premium. Why do private sector life insurance companies concentrate more on Linked business?
- a) It is easier to market unit linked policies since the prospect of getting high returns attracts many. The possibility of losing is underplayed. In simple terms, it is always easy to market dreams than facts.
- b) Individual policyholders may suffer losses in unit linked business but, the life insurance company never suffers a loss even if the stock market crashes since even minimum maturity value is not guaranteed under unit linked policies. In fact, to make a loss in the unit linked portfolio, a company has to be highly incompetent.

- c) The shareholder gets 100% of the surplus, net of tax. The rate of tax is 14.1625% of the Valuation Surplus. This rate was fixed more than four decades ago on the assumption that not less than 80% of the surplus gets allocated to policyholders in the form of bonus. In those days, the proportion of non-participating policies was very low and it was not felt necessary to have a higher rate of tax in respect of these policies. But now, unit linked policies, which come under the non-participating class, constitute a significant proportion of the total portfolio and the entire surplus goes only to Shareholders. Still the rate of tax is based on the assumption that 80% of the surplus is allocated to policyholders. This is an additional attraction for companies to market unit linked policies.
- A25) One may wonder as to why the LIC is concentrating more on Single Premium. Actually, it is not concentrating on Single Premium business and it only appears so. A major portion of the single premium income of LIC comes from Group policies and, a major portion of the premium income under group policies is being classified as single premium. This creates an impression that the LIC is concentrating on single premium policies just to show a high market share of first year premium income.
- **A26)** This will raise the question, how LIC is able to maintain a high market share in group premium income?
- a) A major portion of the group premium income comes from fund based schemes like Pension, Gratuity and Leave encashment funds of companies. The trustees of these funds prefer to entrust these funds to the LIC for two reasons: to ensure security of these funds and also because LIC is able to give a better yield. Further since the profit margin under Group business is very small, many of the companies in the private sector are not very keen in marketing this business.

- b) LIC and the general insurance companies in the public sector maintain pension funds of their pension optees. When an employee retires or when the D.A portion of the pension increases, ... etc. an immediate annuity is purchased from LIC by paying a single premium. Most of the single premium under group pension comes from this source.
- c) Even under Individual business, only LIC is actively marketing annuity business. Under this portfolio, all immediate annuities are purchased through single premium.
- d) Even under Individual Assurance policies, there is a good demand for single premium plans since many persons do not like the prospect of having to pay premiums every year for 15 to 20 years. From time to time LIC designs special single premium plans to cater to this segment of the market.

But there is also a downside in marketing a large number of Individual, Single Premium assurance policies, as will be seen in paragraph (C5).

B) Measures of Lapsation of Policies

B1) In the issue dated 7th September 2018 of The Times of India (Business), under the Heading, "Nearly 25% Premium under new policies goes waste", it is stated,

"According to data released by Insurance Regulatory and Development Authority of India (IRDAI) in its Insurance Statistics Hand Book, the 13th month persistency for LIC of India in terms of the policies sold was 64% in March 2017. This means that, of the policies sold in the previous year, 36% of the customers did not renew them in the subsequent year. This improved to 66% in 2018".

The Insurance Statistics Handbook is available in the website of IRDAI under "Reports". The 27th item in the Handbook deals with persistency. The information is an Excel File with the extension .xls. Change the extension to .xlsx and then download it.

TABLE – 11A
Persistency Based on Number of Policies (LIC of India)

Year	Percentage Number of Policies in force as at the beginning of n th month						
1 001	13	25	37	49	61		
2013 – 14	59	56	53	49	44		
2014 – 15	66	51	49	47	44		
2015 – 16	63	60	48	47	44		
2016 – 17	64	56	56	45	44		
2017 – 18	66	58	53	53	43		

- **B2)** We have to clearly understand what the above TABLE represents. 13th month means beginning of second policy year. 25th month means beginning of third policy year ... and 61st month means beginning of sixth policy year. Let us consider the first row of the above TABLE. Which are the policies beginning their second policy year in 2013 14? Policies issued in the year 2012 13, will begin their second policy year in 2013 14. Similarly, policies issued in the year 2011 12, will begin their third policy year in 2013 14 ... and Policies issued in 2008 09 will begin their 6th policy year in 2013 14. This can be written as,
 - First Cell, First Row → Of the policies issued in 2012 13, 59% will be in force at the beginning of their second policy year in 2013 – 14.
 - Second Cell, First Row → Of the policies issued in 2011 12, 56% will be in force at the beginning of their third policy year in 2013 – 14.
 - ----- etc.
 - Fifth Cell, First Row → Of the policies issued in 2008 09, 44% will be in force at the beginning of their sixth policy year in 2013 – 14.

B3) Similarly,

 First Cell, Fifth Row → 66% of the policies issued in 2016 – 17 will be in force at the beginning of their second policy year in 2017 – 18.

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• ----- etc.

- Fifth Cell, Fifth Row → 43% of the policies issued in 2012 13 will be in force at the beginning of their sixth policy year in 2017 – 18.
- **B4)** Consider this in another way. Starting from the first cell at the top row, move down diagonally,

Of the policies issued in 2012 – 13,

- First Cell, First Row → 59% will be in force at the beginning of the 13th month,
- Second Cell, Second Row → 51% will be in force at the beginning of 25th month,
- Third Cell, Third Row → 48% will be in force at the beginning of 37th month,
- Fourth Cell, Fourth Row \rightarrow 45% will be in force at the beginning of 49th month,
- Fifth Cell, Fifth Row → 43% will be in force at the beginning of 61th month,
- **B5)** Starting from the second cell at the top row, move down diagonally. Of the policies issued in 2011 12,
- Second Cell, First Row → 56% will be in force at the beginning of the 25th month.
- Third Cell, Second Row → 49% will be in force at the beginning of 37th month,
- Fourth Cell, Third Row \rightarrow 47% will be in force at the beginning of 49th month,
- Fifth Cell, Fourth Row → 44% will be in force at the beginning of 61th month,
- **B6)** Of the policies issued in a year, **approximately** about 65% of the policies are in force as at the beginning of the second year. That is, just more than one third of the policies issued in a year lapse during the first policy year itself and, only about 40% of the policies are in force at the beginning of the sixth year. The question that may naturally rise is, 'Is the

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performance of the companies in the private sector as bad as that of the LIC?" In TABLE – 11B, the performance of LIC has been compared with that of some of the leading companies in the private sector; ICICI Prudential, HDFC Standard Life and SBI Life.

*** SBI Life is a subsidiary of State Bank of India, a Public Sector Bank, and the largest among Indian banks.

B7) It can be seen from this TABLE that the 13th month persistency has been quite low in the case of LIC of India. In the 61st month, while the other companies are gradually improving, there is no improvement in the case of LIC.

B8) Why is the 13th month persistency quite low in the case of the LIC? For keeping the agency in force, an agent has to bring not only a minimum amount of first year premium income but also complete a minimum number of policies each year. Also, to become eligible for Club Memberships (like Branch Manager's Club, Divisional Manager's Club, Zonal Manager's Club, Chairman's Club and Corporate Club) and to retain that membership an agent has to bring not only a minimum amount of first year premium income but also complete a minimum number of policies (lives) each year. These club memberships have not only "Status" value, but also carry significant amount of perks. Many agents find it easy to fulfill the norms regarding first year premium income, but face difficulty in completing minimum number of policies. In such circumstances, they procure proposals from their friends and relatives, for the minimum permissible sum assured and maximum permissible term, so that the quarterly premium required will be as small as possible. The premiums in respect of these proposals are paid by the agents themselves and the resulting policies are allowed to lapse once the

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continuation of the agency or club membership is achieved. This is the major reason for the high volume of first year lapses in the case of LIC. Since the premiums under these policies are quite small, such programmed lapses do not result in any significant reduction in premium income, as will be shown, when we take up Conservation Ratio.

TABLE – 11B
Persistency Based on Number of Policies
(LIC of India and three leading companies)

	,	Duration					
Year	Companies	13	25	37	49	61	
	LIC of India	59	56	53	49	44	
2013 – 14	ICICI Pru	66	63	47	24	11	
	HDFC Standard	68	66	56	44	25	
	SBI Life	68	58	49	25	11	
	LIC of India	66	51	49	47	44	
2014 – 15	ICICI Pru	73	61	58	43	17	
	HDFC Standard	68	66	56	44	25	
	SBI Life	69	57	51	37	16	
	LIC of India	63	60	48	47	44	
2015 - 16	ICICI Pru	79	66	56	55	35	
	HDFC Standard	71	61	55	56	41	
	SBI Life	69	59	50	43	23	
	LIC of India	64	56	56	45	44	
2016 – 17	ICICI Pru	81	71	62	54	49	
	HDFC Standard	67	65	58	53	50	
	SBI Life	69	58	55	40	37	
	LIC of India	66	58	53	53	43	
2017 - 18	ICICI Pru	81	73	66	59	49	
	HDFC Standard	69	61	60	55	47	
	SBI Life	70	60	53	50	38	

Duration-wise Lapses

B9) Before the formation of the IRDAI, a slightly different system for measuring persistency was in vogue. When a policy lapses in the same financial year in which the policy was introduced, it was termed as Zero Duration lapse. If it lapsed in the following financial year, it was termed as One Duration lapse. A Company had to give, for policies introduced in

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each financial year, percentage of policies lapsing in Zero, One, Two and Three Durations. TABLE – 12 below gives the percentage of policies lapsing in durations 0, 1, 2 and 3, in the case of LIC of India, for policies introduced in three years.

TABLE - 12
Lapse Percentages at Mean Durations, 0, 1, 2 and 3 of LIC of India

Lapse Fercentages at Mean Durations, 0, 1, 2 and 3 of Lic of India								
Year of	Zero	One	Two	Three				
Introduction	Duration	Duration	Duration	Duration	Total			
1986 – 87	0.6%	15.6%	6.8%	2.8%	25.8%			
1991 – 92	0.9%	14.5%	8.9%	3.5%	27.8%			
1996 – 97	1.1%	16.3%	9.4%	2.4%	29.2%			

B10) Out of policies introduced in the financial year 1986 - 87, 0.6% of the policies lapsed in the same financial year; 15.6% of the policies lapsed in the first financial year following the year of introduction of the policy; 6.8% of the policies lapsed in the second financial year following the year of introduction of the policy and 2.8% of the policies lapsed in the third financial year following the year of introduction of the policy. Thus, out of the policies introduced in 1986 - 87, 25.8% of the policies lapse within three financial years following the financial year in which the policies were introduced. This percentage was 27.8% in the case of policies introduced five years later, in the financial year 1991 - 92 and 29.2% in the case of policies introduced 10 years later in 1996 - 97. That is, the percentage of policies lapsing within three financial years after the year in which they were introduced has been gradually increasing.

B11) While scanning the Net to get some data on lapses, I came across a well written article titled "The lapsation of life insurance policies in India – Causes and Costs", in the CII (Confederation of Indian Industries) website. The article has been written on 26th April 2013 by

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Ms.V.Padmavathi. The volume of data that the author has gathered from various sources is remarkable. In my present condition (of health), I am not in a position to check the exhaustive calculations made by the author, but am only using the data that she has given.

B12) The percentage of policies lapsing in durations 0, 1, 2 and 3, in the case of LIC of India, for policies introduced in three years, 1986 – 87, 1991 – 92 and 1996 – 97, was given in TABLE – 12. Ms.Padmavathi has given the corresponding figures in respect of some leading insurers, before the nationalisation of life insurance in 1956. She has taken the data from Page 209 of Era Sezhiyan Committee Report on "The Review of Working of LIC".

TABLE – 13A
Percentage of Policies lapsing in durations 0, 1, 2 and 3
In respect of policies issued in 1951

	in respect of policies issued in 1001							
		Zero	One	Two	Three			
Year	Company	Duration	Duration	Duration	Duration	Total		
	Oriental	1	18	9	7	35%		
	Hindustan Co-op	3	30	11	3	47%		
	New India	9	24	7	-2	38%		
1951	Bombay Mutual	2	16	10	4	32%		
	National	3	33	12	3	51%		
	United India	4	21	10	3	38%		
	Combined							
	Experience	7.3	27.0	9.3	1.6	45.2%		

- Till 1962, Financial Year and Calendar Year were same
- Negative Lapse means that the number of revivals had been greater than number of lapses.
- Combined Experience <u>may be</u> the weighted average

TABLE – 13B
Percentage of Policies lapsing in durations 0, 1, 2 and 3
In respect of policies issued in 1952

		Zero	One	Two	Three	
Year	Company	Duration	Duration	Duration	Duration	Total
	Oriental	1	18	10	17	46%
	Hindustan Co-op	4	31	9	2	46%
1952	New India	10	23	9	-2	40%
1932	Bombay Mutual	3	24	11	3	41%
	National	2	31	12	2	47%
	United India	3	21	9	2	35%
	Combined					
	Experience	7.0	27.3	9.0	2.9	46.2%

B13) It can be seen from the above figures that the lapse experience of private life insurance companies, before nationalisation of life insurance in 1956, was not very good. After nationalisation, the LIC was successful in controlling the lapses. But, after the opening of insurance sector in the year 2000, the LIC has not been able to maintain its control on lapses and its performance in this regard appears to have deteriorated. This aspect needs to be examined further.

Comparison of the Two Systems

B14) Of the two systems,

- Persistency as at the end of 13th, 25th, 37th ... etc. months, given in TABLE – 11A and TABLE – 11B and
- Duration-wise percentage of lapses given in TABLE 12, TABLE 13A and TABLE 13B,

Which is the better one?

B15) There can be many types of exits in the case of a policy, viz. lapse, surrender, death claim and maturity claim (cancellation of policy can be ignored). Of these, maturity claim cannot occur before the end of 5 years

and, even at the end of 5 years, will be negligible in number. The lapse and surrender are voluntary exits and death claim is not so. In the first system, "Persistency as at the end of", all the exits are taken into account and balance policies remaining in force is expressed as a percentage. In the second system only lapses are taken into consideration. So, the first system gives a better measure. **But, the second system which was in use earlier had better clarity.**

B16) The "Persistency" system introduced by the IRDA can be implemented only if the organisation has good computer support. In the first three decades of the twentieth century, the life insurance companies were performing all functions manually. In the forties, a system based on punched cards, known as Unit Record System, came into use. In the mid sixties, the LIC of India computerised its Bombay (now known as Mumbai) office. Only in the eighties, it could introduce full computerisation in all its offices. So, the "persistency" system could not have been introduced earlier.

Net Lapse Ratio

B17) There is also another method, known as Net Lapse Ratio, for measuring incidence of lapses. This ratio is determined at the time of each valuation and is contained in the Note submitted to the Board by the Chief Actuary. Net Lapse ratio during the year is defined as the Ratio of (Number of lapses less number of revivals) during the year to the (Mean number of policies in force) during the year. The value of this ratio used to be available in the Annual Reports of the LIC. But, after the opening of the Insurance Sector and the formation of IRDAI this ratio is not being given. I could not also get this ratio either in the Annual Report of the IRDAI or in the Disclosure Statements being published by the companies.

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I was therefore pleasantly surprised to find the values of this ratio for the period 1959 to 2011 – 12 in Ms.Padmavathi's article and I have reproduced them in TABLE – 14.

B18) Till 1961, the calendar year and financial year were the same for LIC. The financial year 1962 – 63 was for a period of 15 months, from 1st January 1962 to 31st March 1963. For the period 1959 to 1992 – 93, Ms.Padmavathi has taken these values from Ganesan Committee Report. For the period 1993 – 94 to 2002 – 03, it seems that the values have been taken from the Annual Reports of LIC. The source of information for other years is not clear.

TABLE – 14
Net lapse Ratio for LIC of India

		lapse Italio		Idia	Mat I amaa
	Net Lapse		Net Lapse		Net Lapse
Year	Ratio	Year	Ratio	Year	Ratio
1959	6.0%	1977 – 78	5.4%	1995 – 96	6.4%
1960	6.6%	1978 – 79	4.6%	1996 – 97	5.1%
1961	7.0%	1979 – 80	3.8%	1997 – 98	5.0%
1962 – 63 (15 months)	8.05	1980 – 81	3.8%	1998 – 99	4.9%
1963 – 64	8.2%	1981 – 82	4.1%	1999 – 00	5.1%
1964 – 65	7.5%	1982 – 83	4.8%	2000 – 01	4.9%
1965 – 66	7.2%	1983 – 84	4.5%	2001 – 02	5.5%
1966 – 67	7.4%	1984 – 85	4.2%	2002 – 03	5.5%
1967 – 68	7.0%	1985 – 86	4.6%	2003 – 04	N.A
1968 – 69	6.3%	1986 – 87	4.6%	2004 – 05	N.A
1969 – 70	5.9%	1987 – 88	4.7%	2005 – 06	5. 0%
1970 – 71	5.2%	1988 – 89	5.0%	2006 – 07	4.0%
1971 – 72	5.0%	1989 – 90	5.6%	2007 – 08	6.0%
1972 – 73	5.3%	1990 – 91	6.0%	2008 – 09	4.0%
1973 – 74	5.3%	1991 – 92	6.1%	2009 – 10	4.0%
1974 – 75	5.4%	1992 – 93	5.9%	2010 – 11	4.9%
1975 – 76	5.4%	1993 – 94	6.4%	2011 – 12	5.0%
1976 – 77	5.3%	1994 – 95	6.1%		

^{***} N.A – Not Available

B19) TABLE – 15 below gives the Net Lapse Ratios of the LIC of India and some of the companies in the Private Sector, for a period of seven years from 2005 – 06 to 2011 – 12.. According to this data, taken from Ms.Padmavathi's article, only in the cases of HDFC Standard Life, SBI Life and LIC of India, the Net Lapse Ratio is reasonably low.

TABLE – 15
Net lapse Ratio (%) for some insurers in Private Sector

1100	2005 –	2006 –	2007 –	2008 -	2009 -	2010 -	2011 –
	2006	2007	2008	2009	2010	2011	2012
Bajaj							
Allianz	20	17	19	14	17	10.7	21.4
Reliance							
Life	28	35	21	40	31	15.7	38.5
Aviva Life	65	57	80	59	24	31	27.8
Birla Sun							
Life	4	4	6	9	39	71.6	51.0
HDFC Std.							
Life	7	4	4	6	8	5.0	4.2
ICICI Pru	29	26	40	53	81	46.5	41.9
ING Vysya Life	20	17	17	16	19	13.9	12.3
Max Life	22	25	17	19	23	13.3	12.6
Met Life	37	34	24	18	25	30.7	29.8
SBI Life	9	19	16	9	7	6.6	9.4
Tata AIG	21	26	35	26	42	33.4	28.3
LIC of India	5	4	6	4	4	4.9	5.0

B20) The Net Lapse Ratio pertains to Financial Year. So, in the case of new policies issued in a financial year, only the "Zero Duration" Lapses will get reflected in this ratio. Since "Zero Duration" lapses are quite negligible, it will not have any significant impact on the Net Lapse Ratio.

In the case of policies issued in the previous financial Year, the "One Duration" lapses will get reflected in the Net Lapse Ratio of current financial year. Since "One Duration" lapses are the maximum and constitute a major portion of the policies lapsing in a year, the Net Lapse Ratio of a year will depend mainly on the number of policies issued in the previous financial year. One more aspect has to be noted. If there is a reduction in the number of new policies procured in a financial year, the number of "One Duration" lapses in the next financial year will also be correspondingly low and so also the Net Lapse Ratio in the next financial year. So, one has to be very careful while interpreting the significance of Net Lapse Ratio.

B21) When we say that the 37th month persistency is, say 55%, it means that, out of the new policies issued during a given period, 55% of the policies are in-force for full sum assured at the end of three years and 45% of the policies have been discontinued. The discontinuance may be voluntary (like lapse and surrender) or involuntary (death claim or maturity claim). The number of policies being discontinued within three, four or five years because of death claim will not be significant. Maturity claims cannot occur before the end of five years. So, most of the 45% policies discontinued during the three years, will be due to surrender or lapse. The difference between these three measures of lapsation has to be noted.

Persistency Rate does not take into account lapsation of a policy after the 60th month. Duration wise lapses do not take into account lapses occurring from the fourth financial year following the year in which the policy was issued. But, Net Lapse Ratio takes into account lapses occurring at any time before the exit of the policy due to surrender, death claim or maturity claim.

As stated in paragraph B15, the 13th, 25, 37th ... Persistency Rates prescribed by the Regulator (IRDAI) take into account both surrenders and lapses. But, the Zero, One, Two, Three duration lapse rates used earlier were not taking into account the discontinuance due to surrender. Since, in the case of non-linked policies, surrender value is acquired only after three full years' premiums are paid, the probability of a policy being surrendered before the 61st month may not be very significant. Net lapse ratio too does not take into account surrenders. The number of policies surrendered in a year is quite substantial. For example, the number of policies surrendered during the year 2018 – 19, was about 5.26 million in the case of LIC of India. But, it is easy to modify suitably the definition of this ratio to take also into account surrenders.

Conservation (of Premium) Ratio

B22) All the three measures of lapsation discussed so far give equal importance to low premium and high premium policies. As was seen in paragraph B8, many of the low premium policies may be dummy policies introduced by the agents just to satisfy the requirement of "minimum number of policies" either for keeping the agency in force or for retaining a club membership or for becoming eligible for club membership. Such policies will be allowed to lapse once the purpose for their introduction is achieved. Giving equal weight to these policies and genuine high premium policies will distort the determination of lapse ratio. The Premium Conservation Ratio, based on premium income, overcomes this lacuna. Let us now see how it is determined.

B23) Suppose in the year N, the first year premium income, excluding Single Premium, is X_1 and Renewal premium income is Y_1 . The first year

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premium income in year N will become renewal premium income in year (N + 1) and, the renewal premium income in year N will continue to be renewal premium income in year (N + 1) (a correction to this statement will be given in paragraph B28).

For example, suppose the quarterly premium under a policy is Rs.100 and the policy is introduced in the fourth quarter of year N. In the year (N + 1), four quarterly premiums of Rs.100 each will be received under this policy. Of these, the first three will be classified under first year renewal and the fourth under Renewal. So, if the first year premium in year N is Rs.100, the renewal premium in year (N + 1) will also be Rs.100.

B24) Similarly, if the policy had been introduced in the third quarter of year N, two quarterly premiums of Rs.100 each will be received in that year and so, the first year premium in year N will be Rs.200. In the year (N + 1), four quarterly premiums of Rs.100 each will be received under this policy. Of these, the first two will be classified under first year renewal and the third and fourth under Renewal. So, when the first year premium in year N is Rs.200, the renewal premium in year (N + 1) will be Rs.200

If the policy lapses in year (N + 1), either there will be no renewal premium or a reduced renewal premium under that policy in year (N + 1). If, in year N, the renewal premium under a policy is, say Rs.400 and if the policy lapses in year (N + 1), the renewal premium under that policy will be 0 or less than Rs.400 in the year (N + 1).

B25) Now consider TABLE – 16, giving the premium income in the case of LIC of India over a period of 30 years. The corresponding conservation ratios are given in TABLE – 17.

TABLE - 16
Break-up of (Individual) Premium Income over last 30 Years
All amounts in Rupees (crores); One Crore = 10 Million

		in Rupees (crores			
Financial	Single	Non Single First	Total First	Renewal	Total
year 1988 – 89	Premium 4	Yr Premium 716	Yr. Premium 720	Premium 2,237	Premium 2,957
1989 – 90	6	981	987	2,849	3,836
1990 – 91	3	1,196	1,199	3,604	4,803
1991 – 92	6	1,405	1,411	4,573	5,984
1992 – 93	4	1,616	1,620	5,567	7,187
100= 00	-	1,010	.,0_0	3,00.	.,
1993 – 94	4	1,900	1,904	6,907	8,811
1994 – 95	17	2,056	2,073	8,370	10.443
1995 – 96	7	2,332	2,339	9,820	12,159
1996 – 97	8	2,813	2,821	11,753	14,574
1997 – 98	19	3,295	3,314	13,833	17,147
1998 – 99	94	3,987	4,181	16,136	20,317
1999 – 00	422	4,956	5,378	19,252	24,630
2000 – 01	1,539	6,591	8,130	22,679	30,809
2001 – 02	5,430	9,966	15,396	27,019	42,415
2002 – 03	3,016	10,216	13,232	34,994	48,226
2003 – 04	862	10,885	11,747	42,321	54,068
2004 – 05	684	10,779	11,463	49,865	61,328
2005 – 06	1,341	12,806	14,147	56,916	71,063
2006 – 07	946	11,720	12,666	65,735	78,401
2007 – 08	264	9,540	9,804	72,944	82,748
2008 – 09	11,336	13,792	25,128	77,577	102,705
2009 – 10	2,510	18,934	21,444	85,376	106,820
2010 – 11	3,041	21,756	24,797	97,481	122,278
2011 – 12	8,709	28,681	37,390	104,185	141,575
2012 – 13	12,714	27,906	40,620	119,287	159,907
	40-15		46	400 = 55	
2013 – 14	13,548	27,010	40,558	136,783	177,341
2014 – 15	13,542	19,432	32,974	152,713	185,687
2015 – 16	12,767	20,060	32,827	159,679	192,506
2016 – 17	23,498	22,176	45,674	166,730	212,404
2017 – 18	26,655	25,098	51,753	175,270	227,023

TABLE - 17
Conservation Ratios of individual Premium Income
All amounts in Rupees (crores); One Crore = 10 Million

/ iii dillodillo	Non Cinala Firet		Concentation
Financial year	Non Single First Year Premium	Renewal Premium	Conservation Ratio
1988 – 89	716	2,237	Nalio
1989 – 90	981	2,849	96.5%
1990 – 91	1,196	3,604	94.1%
1991 – 92	1,405	4,573	95.3%
1992 – 93	1,616	5,567	93.1%
1002 00	1,010	0,007	00.170
1993 – 94	1,900	6,907	96.2%
1994 – 95	2,056	8,370	95.0%
1995 – 96	2,332	9,820	94.2%
1996 – 97	2,813	11,753	96.7%
1997 – 98	3,295	13,833	95.0%
	,	,	
1998 – 99	3,987	16,136	94.2%
1999 – 00	4,956	19,252	95.7%
2000 – 01	6,591	22,679	93.7%
2001 – 02	9,966	27,019	92.3%
2002 – 03	10,216	34,994	94.6%
2003 – 04	10,885	42,321	93.6%
2004 – 05	10,779	49,865	93.7%
2005 – 06	12,806	56,916	93.9%
2006 – 07	11,720	65,735	94.3%
2007 – 08	9,540	72,944	94.2%
2008 – 09	13,792	77,577	94.1%
2009 – 10	18,934	85,376	93.4%
2010 – 11	21,756	97,481	93.5%
2011 – 12	28,681	104,185	87.4%
2012 – 13	27,906	119,287	89.8%
2013 – 14	27,010	136,783	93.0%
2014 – 15	19,432	152,713	93.2%
2015 – 16	20,060	159,679	92.8%
2016 – 17	22,176	166,730	92.8%
2017 – 18	25,098	175,270	92.8%

Method of Calculation of Conservation Ratio

B26) In the year 2013 - 14, Non-Single first year premium is Rs.27,010 crores (one crore = 10 million). The renewal premium in that year is Rs.136,783 crores. So, in the year 2014 - 15, the renewal premium income should be,

(27,010cr. + 136,783cr) = Rs.163,793 crores.

But, the actual renewal premium received in 2014 – 15 is only Rs.152,713. The Conservation Ratio for the year 2014 – 2015 is defined as,

(Renewal Premium Received / Renewal Premium Receivable)

$$= (152,713 / 163,793) = 93.2\%$$

The conservation ratio for the year 1989 – 90 is given by,

[Renewal Premium of 1989 – 90 / (Non Single First Year Premium + Renewal Premium) of 1988 – 89]

$$= 2,849 / (716 + 2,237) = 96.5\%$$

Similarly, the Conservation Ratios of other years can be calculated.

B27) A study of the conservation ratios based on premium, shows that mainly, it is the policies for small sum assured and, correspondingly low premium that lapse. One more trend can be noticed. Though, for most of the years, the conservation ratio is higher than 92.5%, a slowly declining trend can be noticed. What can be the reason for this?

B28) It was mentioned in paragraph B23 that, a correction to the statement "the renewal premium income in year N will continue to be renewal premium income in year (N + 1) will be given in paragraph B28. Let us now see the correction to this statement. The renewal premium income in year N will continue to be the renewal premium income in year (N + 1) provided, the policy does not mature in year (N + 1). Suppose the

mode of payment is yearly and the policy matures in the year (N + 1). The last premium payable under that policy would have been paid in the year N and no renewal premium will be payable in the year (N + 1). Suppose the mode of payment is quarterly and the policy matures in the second quarter of the year (N + 1). Only one quarterly premium will then be payable under that policy in the year (N + 1). That is, the renewal premium under that policy in the year (N + 1) will be only one fourth of that in the year N. So, when a policy matures in the year (N + 1), the renewal premium under that policy in the year (N + 1) will be less than that in the year N.

B29) So Renewal Premium Income receivable in year (N + !) will be,

- = First year premium income, excluding single premiums, in year N
 - + [(Renewal premium income in year N) y],

where y will depend on number of policies that mature in year (N + 1) (death claims are ignored). Higher the number of policies that mature in year (N + 1), higher will be the value of y and correspondingly, the value of renewal premium income receivable will decrease. In the Conservation Ratio, (Actual Renewal Premium received / Renewal premium receivable), as the value of denominator decreases, the value of the ratio will increase.

B30) TABLE – 18 below gives the number of maturity claims and death claims in each year, starting from the year 2005 – 06 onwards. These figures were taken from the Public Disclosure section of LIC's website. The item titled L40 in the Public Disclosure pertains to number of payments under different policy benefits like maturity claim, Death Claim, Surrenders, Survival Benefits, ... etc. *This data is however not available for the year 2008 – 2009 since L40 for the year 2007 – 2008 has been*

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loaded, by mistake, by the IRDAI both for the year 2007 – 2008 and the year 2008 – 2009.

TABLE - 18
Number of Maturity and Death Claims in each year

		matarity aria	1		
	Number of	Number of		Number of	Number of
	Maturity	Death		Maturity	Death
	Claims	Claims		Claims	Claims
V-0."			V-0"		
Year	(Millions)	(Millions)	Year	(Millions)	(Millions)
2005 – 06	2.81	0.43	2012 – 13	5.77	0.74
2003 – 00	2.01	0.70	2012 - 13	0.11	0.7 7
2006 – 07	3.33	0.48	2013 – 14	6.93	0.75
2000 07	0.00	0.10	2010 11	0.00	017 0
2007 – 08	3.32	0.54	2014 – 15	6.59	0.75
	Not	Not			
				7.40	4.00
2008 – 09	Available	Available	2015 – 16	7.40	1.00
0000 40	2.04	0.66	0040 47	7.40	4.00
2009 – 10	3.94	0.66	2016 – 17	7.42	1.06
0040 44	1 50	0.72	0047 40	10.21	1.00
2010 – 11	4.58	0.73	2017 – 18	10.21	1.02
2011 12	5.74	0.72	2018 – 19	12.27	1.01
2011 – 12	J.14	0.72	2010 - 19	12.21	1.01
L			1		

B31) From the data available in the public domain we can only determine the Renewal Premium Receivable in year (N + 1) as the Sum of (First year premium and Renewal Premium) in year N. The reduction in this value due to policies maturing in year (N + 1) will make denominator of the ratio smaller and hence the actual Conservation Ration will be higher than what has been determined in Table - 16. Larger the number of policies maturing in year (N + 1), smaller will be the denominator and higher will be the Conservation Ratio.

B32) Let us consider, for example, the year 2017 – 2018. The conservation ratio for this year as per TABLE – 17 is, 92.8%. This was arrived at as,

((Renewal Premium received / Renewal Premium receivable)

- = [175,270 / (22,176 + 166,730)]
- = (175,270 / 188,906) = 0.9278 = 92.8% approximately.

In the above working, reduction in renewal premium receivable due to policies maturing during the year 2017 - 2018 was not taken into account. As per TABLE – 18, number of policies maturing in the year 2017 - 2018 is 10.21 million. Suppose the average annual premium under these policies were Rs.5,000/. The total annual premium under these policies will be (Rs.10.21 x 5000 = Rs.51,050 million.= Rs.5,105 crores)

If the mode of payment is yearly under all these policies, the last premium under these policies would have been received in 2016 – 2017 and no renewal premium will be receivable in 2017 – 2018. If the mode of payment under all these policies were quarterly and all the policies were maturing in the last quarter of 2017 – 2018. The last premium under these policies will then be payable in the third quarter of 2017 – 2018. That is, three quarters of the premium will be payable in 2017 – 2018. Let us assume that, on an average, only half a year's premium will be payable under these policies in the year 2017 – 18. In other words, on an average, half a year's premium will not be payable under these policies in the year 2017 – 2018.

So, renewal premium receivable in 2017 – 18 will be,

Rs.[22,176 + 166,730 - (50% of 5,105)] crores

(Rs.188,906 - Rs.2,502) crores = Rs.186,404 crores.

So, Conservation Ratio = ((Renewal Premium received / Renewal Premium receivable)

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= (175,270 / 186,404) = 0.9402 = 94.0% approximately.

B33) It can be seen from TABLE – 18 that the number of policies maturing in each year is going on increasing and, in the last two years, it has exceeded 10 million. The corresponding reduction in the Renewal Premium Income Receivable will be quite significant and hence the Actual Conservation Ratio will be higher than what is given in TABLE – 16. In my view, it will be not less than 94%. So, except for the two years 2011 – 12 and 2012 – 13, the Conservation Ratio will be higher than 94%. This is certainly a reasonably good performance, but cannot be called very good performance. With a little effort, the LIC of India can achieve a Conservation Ratio of not less than 95%.

C) Some Suggestions for Consideration

C1) Minimum number of policies to be procured in a year by an agent

C1.1) Let me repeat here what was seen in paragraph (B8). For keeping the agency in force, an agent has to bring not only a minimum amount of first year premium income but also complete minimum number of policies each year. Also, to become eligible for Club Memberships (like Branch Manager's Club, Divisional Manager's Club, Zonal Manager's Club, Chairman's Club and Corporate Club) an agent and to retain that membership he/she has to an agent has to bring not only a minimum amount of first year premium income but also complete minimum number of policies each year. These club memberships have not only "Status" value, but also carry significant amount of perks. Many agents find it easy to fulfill the norms regarding first year premium income, but face difficulty in completing minimum number of policies.

C1.2) In such circumstances, they procure proposals from their friends and relatives, for the minimum permissible sum assured and maximum

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permissible term, so that the quarterly premium required will be as small as possible. The premiums in respect of these proposals will be paid by the agents themselves and the resulting policies will be allowed to lapse once the continuation of the agency or club membership is achieved.

C1.3) No study has so far been conducted as to how many such dummy policies are introduced each year and allowed to lapse after payment of just one quarterly premium. Just imagine the cost involved in processing such proposals, preparing policy documents and policy dockets and preserving the dockets in the Record Rooms. The cost would be very much higher than the one quarterly premium received under these policies. Who bears this cost? Not shareholders, but policyholders, indirectly in the form of reduction in bonus.

C1.4) This matter was discussed at length by the "Malhotra Committee on Reforms in the Insurance Sector" and its recommendation in this regard (Chapter III of the Report dated January 1994) is given below.

Agents Rules, 1972, stipulate a minimum number of 12 lives. It has been mentioned to the Committee that the requirement of number of lives has led to undesirable practices as agents put in bogus policies with small instalments of premium to make up the quota of lives. LIC incurs considerable cost on such policies which lapse after the first instalment. A two-fold corrective is suggested.

- Agents who bring in large sized policies may be allowed to set off the shortfall in lives by corresponding increase in the sum assured.

- LIC may prescribe lower quotas of lives and sum assured for the first and second year of a new agent.

The Regulator and the LIC should try to implement this recommendation.

C2) Strengthening of Marketing Wing of Branch offices

c2.1) A good Assistant Branch Manager (Sales) [ABM(S)] is essential to enhance the quantity and quality of new business of a Branch Office. The recruitment and initial training of agents is done by the Development officers (agency managers). This is only an informal training. Since almost all the new agents will initially be part time agents, there will be many logistical difficulties in bringing them all together for about 5 days to provide a formal training. This gap in training is supposed to be filled by the ABM(S). From time to time, he can meet these agents in small groups and provide them advanced training. He can also go on joint calls with some of them and show how to canvass and how to close a deal. But, the number of ABM(S) that the Corporation is now having is highly inadequate and they spend more time in office work than field work. Urgent steps are needed to enhance the strength of this cadre.

c2.2) In the sixties and seventies, the post of ABM(S) used to be attractive since a person posted as ABM(S) could get car and telephone, which were considered luxuries in those days. Now, everyone is having a mobile phone and, since rate of growth of salary has been much higher than the rate of increase in price of cars, it is not difficult for an ambitious person to buy a car. So, the post of ABM(S) is no longer much sought after.

C2.3) I have personally seen that many of the successful Branch Managers and ManagerS (Sales) had initially entered the service as development officers. But, when the development officers are now reluctant to take promotion as Asst. Branch Manager (Sales), LIC is not able to fill the positions of Branch Managers with those who were highly

successful as Development Officers. LIC should find some way to again make the post of ABM(S) attractive.

C2.4) Just as the Corporation is directly recruiting Assistant Administrative Officers (AAO) every year from the open market, it should also draw up a program for direct recruitment of ABM(S) every year. (Please see the recommendation of the Malhotra Committee in this regard. Chapter III Recommendation xiv)

C3) Promoting Development Officers directly as Branch Managers

C3.1) Corporation should also examine the feasibility of promoting highly competent development officers directly as Branch Managers. Stringent conditions can be prescribed regarding age, experience, business performance and educational qualification to become eligible for such a promotion. Such a step will act as an incentive for young development officers to try their best to enhance their performance.

C4) A Relook at the Incentive Bonus Scheme

C4.1) The highly successful "incentive bonus scheme for Development Officers", that was introduced by former Chairman Shri. T.A.Pai, had undergone some minor changes from time to time. But, the change effected about ten years ago was a major one. It was a drastic change and the reduction in the incentive bonus payable to development officers was quite steep. The only justification for this change can be the apparent reduction in cost. Till Shri.Pai took over as chairman, the progress of the Corporation had been quite sluggish and the rate of growth of business was low. It was Shri.Pai who showed the Corporation that, in any business, you have to spend first before you can earn a good profit. You cannot say that only after getting a good profit I will spend. With the

change in the pattern of incentive bonus, the Corporation appears to have gone back to Pre-Pai days.

C4.2) Due to payment of incentive bonus, first year expense may increase but, due to the additional business generated, not only the first year cost ratio but also the renewal cost ratio will decrease, leading to higher generation of Surplus. The new incentive bonus scheme introduced about ten years ago may, in practice, prove to be a disincentive scheme. The earlier Scheme may be having some drawbacks. The present Management should review the scheme and bring in an improved version of the earlier scheme. Earlier this is done, it is better.

C5) Impact of Single Premium policies

C5.1) It was mentioned in paragraph (A13) that, "In fact, the Corporation is able to show impressive figures of market share of first year premium income only through single Premium policies. This has got some disadvantage, as will be seen a little later". It was also mentioned in paragraph (A26) that, "But there is also a downside in marketing a large number of Individual, Single Premium assurance policies, as will be seen in paragraph (C5)".

What are these disadvantages?

C5.2) Under single premium policies there will be very little activity once the policy is issued. When the number of single premium policies increases, activity in Finance and Policy Servicing sections will start decreasing. This would affect creation of new jobs. The total number of employees will remain stagnant for some time and then may even start decreasing.

C5.3) As per Regulations, the total amount of Management Expenses (Commission + Operating Expenses) throughout its term, in respect of a single premium policy, cannot exceed 5% of the single premium. In respect of a Regular Premium policy, the maximum Management expenses that can be incurred will be,

- 60% of the first year premium +
- 15% Of each renewal premium

Consider for example a 20 year Endowment plan for Rs.1,000 sum assured, in respect of a person aged 35. The annual premium under this will be Rs. 52.85 and the corresponding single premium will be Rs.621.50. (These rates were taken from the old agents' manual of LIC just for demonstration, though these rates might have now been changed slightly).

Under Single Premium:

C5.4) Maximum Management expenses (commission + operating expenses) permitted for the whole term (i.e. 20 years) is,

$$(5\% \text{ of } 621.50) = \text{Rs.} 31.08$$

Of this, maximum commission payable = 2% of 621.50 = Rs.12.43

Maximum operating expenses permitted

$$= (31.08 - 12.43) = Rs.18.65$$

Under Annual Premium:

Maximum Management expenses permitted:

In the first year, (60% of 52.85) = Rs. 31.71

In each of the next 19 years, (15% of 52.85) = Rs.7.93

Total management expenses permitted during the term of the policy

$$= 31.71 + (19 \times 7.93) = 31.71 + 150.67$$

= Rs.182.38

Of this,

Maximum first year commission = (35% of 52.85) = Rs.18.50 (the percentage will start decreasing for terms below 15 years) 2^{nd} and 3^{rd} year commission = (7.5% of 52.85) = Rs.3.96 Subsequent years' commission = (5% of 52.85) = Rs.2.64 Total commission during the 20 year term = $18.50 + 3.96 + 3.96 + (17 \times 2.64)$ = Rs.71.30 So, maximum operating expenses permitted = 182.38 - 71.30 = Rs.111.08

C5.5) The provision for operating expenses under the Regular Premium policy is about Six times that under single Premium policy since the volume of work involved in servicing the policy is much higher than that in servicing a single premium policy.

So, when the number of policies under single premium mode increases and the number under regular premium mode decreases, the provision for operating expenses will reduce and the volume of work involved in servicing the policies will also decrease, leading to reduction in work force.

Impact of Single Premium policies on agents

C5.6) The Maximum commission that can be paid on a single premium is 2% of the single premium and there will be no renewal commission. Since a significant proportion of first year commission gets spent in procuring new business, the agents depend on steady inflow of renewal commission to sustain themselves. When the number of policies under single premium mode increases and the number under regular premium mode decreases the agents' renewal commission income will decrease. This can lead to a decrease in the number of agents opting for full time

agency. This, in turn, can affect the development of professional agency force.

Market share of Renewal Premium

C5.7) When the entire single premium is treated as first year premium, the renewal premium income will become zero and, this will lead to reduction in market share of renewal premium income. This can impair the image of LIC. One way to avoid this will be to take only 10% of the single premium as first year premium and allot the balance 90% as renewal premium for the next nine years, @10% of single premium for each of the nine years, from second to tenth years. But, this will reduce the market share of first year premium.

Discounted Premium – An Alternative to Single Premium

C5.8) Consider again for example, a 20 year Endowment plan for Rs.1,000 sum assured, in respect of a person aged 35. The annual premium under this will be Rs. 52.85 and the corresponding single premium will be Rs.621.50. (These rates were taken from the old agents' manual of LIC just for demonstration, though these rates might have now been changed). Let us find the discounted value of the 20 instalments, using a discount rate of say, 6%.

Here rate of interest is i = 6%, i.e. 0.06

Let **v** be equal to
$$(1 / (1 + i)) = (1 / 1.06) = 0.943396$$

Then, the discounted value (i.e. present value) as at the date of commencement of the policy, of the 20 instalments of Rs.52.85 each, payable at the beginning of each year will be

$$= 52.85 \times (1 + v + v^2 + ... v^{19})$$

$$= 52.85 \times (1 - v^{20}) / (1 - v)$$

= 642.56

This is slightly higher than the single premium Rs.621.50

C5.9) Under discounted premium, the policyholder has to pay Rs.642.60 and the same will be kept in "discounted premium deposit". From this deposit, Rs.52.85 will be adjusted towards first premium and the balance (Rs.589.75) will be held in deposit.

This deposit will earn interest @6% for a year. At the beginning of second year, the discounted premium deposit will become, 589.75 x (1.06) = 625.14.

From this Rs.52.85 will be deducted towards second year premium and the balance deposit will be Rs.572.29.

This will earn interest @6% and the deposit at the beginning of third year will be $572.29 \times 1.06 = 606.63$.

From this Rs.52.85 will be deducted towards third year premium and the balance deposit will be Rs.553.78.

Proceeding similarly, it would be seen that at the beginning of 20th year, after adjusting the 20th premium, the deposit will become zero.

C5.10) The advantages of discounted premium over single premium

- If death claim occurs before the end of the term,
 In the case of discounted premium, the balance amount in deposit will be refunded to the claimant. It is not so in the case of single premium.
- The provision for Management Expenses will be the same as that under regular premium policies and so, there will be no reduction in the staff strength.
- The agency commission will be payable as and when the premium for each year gets adjusted and so will be the same as under regular premium policies. The agents will not therefore suffer

- reduction in renewal commission. The credit to Development Officer will also be the same as under annual premium policies.
- Unlike in the case of single premium, full Income tax benefits under Sec.80(C) will be available as and when each premium gets adjusted.

C5.11) By reducing first year commission to 20% (plus bonus commission) and 2nd and 3rd year commission to 5%, the difference between discounted premium and single premium can be reduced. The LIC has to find some method for offering discounted premium as an alternative to single premium. Before the nationalisation of life insurance in 1956, discounted premium was being used by private insurers. When the number of policies became very large, this method could be used only under computerised setup. Only by the mid nineties, LIC could fully computerise its functions, but the discounted premium was not reintroduced. This can be used as an alternative to Single Premium and also for payment of renewal premiums.

C5.12) If a person desires to pay say, three renewal premiums in advance, the discounted value of these three premiums can be taken. This system was in use even in sixties. My first posting after joining LIC was in Cuttack Division. In 1962, just after Chinese invasion, a military officer who was posted to Eastern front, came to policy servicing department and wanted to pay next 5 years' premiums in advance in order to ensure that his policy will not lapse when he was away. I gave him the quotation for discounted premium and he was quite happy with that system. The Corporation should revive this system now. This is also one of the methods for reducing lapses.

Banks having Corporate Agency Agreement

C5.13) If a bank having Corporate Agency agreement with LIC, markets a discounted premium policy, the bank can be permitted to keep the discounted premium, less first year premium, in Fixed deposit for five years. The bank should offer the rate of interest applicable to senior citizens for a five year deposit. But, the rate of interest should not be less than 6%.. From the accumulated amount of deposit, the bank should remit the annual premium to LIC at the beginning of 2nd, 3rd, 4th, 5th and 6th years. After remitting the sixth premium, the balance amount I deposit is to be refunded to LIC. The prospect of keeping the amounts collected in fixed deposit for five years, in addition to earning commission at Regular premium rates will prove to be highly attractive to banks.

C6) Introduction of new Plan of Insurance

C6.1) If an Endowment plan, with health insurance as a built-in benefit, is introduced, it would be very popular and will increase LIC's market share of new business. The maximum term can be kept as 20 years. To keep in step with inflation and corresponding increase in medical expenses, the health cover should also increase every five years. The feasibility of such a plan has already been demonstrated.

C6.2) It is worth mentioning here that such an Endowment plan was introduced in SriLanka about 25 years ago. The sum assured corresponding to health cover was quite low at that time. Now, with steep increase in cost of hospitalisation, the average sum assured corresponding to hospitalisation cover has to be atleast ten times higher. If LIC starts working on this Plan now, it can be introduced in April 2020.

C6.3) The advantage in having a built-in health-cover will be reduction in loading for expenses. Except for the costs relating to hospitalisation claim settlement, other operational expenses will get absorbed in the basic Endowment Plan and this will lead to reduction in premium rates. In addition to built-in hospitalisation cover, provision can also be made for additional hospitalisation cover.

C7) Increasing the visibility of the Corporation

C7.1) There are a number of Branch offices in LIC servicing more than 100,000 policies. This will gradually lead to inefficiency and limit their accessibility to policyholders. As a matter of policy, when the number of policies in a branch office exceeds 50,000, it should be split into two branches. This may initially appear to increase the cost. But, by increasing the Corporation's visibility, it would lead to a significant increase in business which, in turn, will reduce the operational cost per policy and result in increased emergence of surplus. The Corporation should draw a five year plan to double the number of branch offices and corresponding increase in number of Divisional offices.

C7.2) It is relevant to mention here an exercise undertaken by the Corporation in the second half of seventies. I was asked to determine the optimum size of a Divisional Office. It was before the Reorganisation and Computerisation of all its offices. Except Bombay (Mumbai) all offices were only having the punched card based Unit Record System. All the Division-wise data required for this exercise like,

- Number of employees under each class,
- Remuneration of the employees for each class,
- Other Operating expenses,
- Number of agents,

- Number of policies being serviced,
- New business performance for the past five years,
- Expenses on Commission,
- Extracts from inspection and audit reports,
- Number of complaints received by Central Office, ... etc.

were given. All the calculations had to be done manually at that time. The study revealed that, upto 300,000 policies, the efficiency factor of a Divisional Office increased with increase in number of policies. Once the number of policies crossed 300,000, the efficiency factor started decreasing. The fully computerized Bombay Division was an exception. Since the study was confidential, I did not keep a copy of my Report.

C7.3) In those days, the premium income from group insurance was not much and the number of annuities was negligible. Now, Group portfolio constitutes a significant proportion of the total portfolio and the number of annuities has also become reasonably high. In those days, most of the functions were centralised in Divisional offices. Now, most of the functions have been decentralised to Branch Offices.

C7.4) With the unlimited computer support available, if a similar study is undertaken now, it would be found that the optimum size of Division is about 1 million 1.25 million policies. Now most of the data required for this study are available on the computer. It is advisable to undertake a similar exercise and on the basis of its results, increase the number of Branch and Divisional offices. This would not only enhance job generation but would also lead to increase in new business and market share of first year premium income. These, in turn, would increase Surplus generation and bonus to policyholders.

In my next article, I will take up Operational Expenses and also try to answer the queries raised regarding the last article "The Disinvestment Policy of the Government and LIC.

22nd December 2019

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