An Enquiry into the Impact of Financial Crisis on Investment Pattern of Life Insurance Corporation of India

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ABSTRACT
The present empirical study makes an in-depth analysis of the investment of Life Insurance Corporation of India (LICI), the insurance behemoth in India. The analysis is made on the basis of fourteen years' data from 2003 to 2016. The study includes an analysis of the investment across sectors namely public, private, joint and cooperative and into different instruments (stock exchange securities and others) by not only looking into the year-on-year growth but also growth during the period. Furthermore, the exploratory study looks into structural break, if any with regard to investment between the pre-financial crisis and post-crisis period. The investigation also aims to find out the relationship between investment in stock exchange securities and capital market movement.

Keyword: LICI investment, growth, Sectoral investment, Instrument investment, Correlation, Structural break

I INTRODUCTION

In financial system, financial intermediaries form very important component that play a major role in the economic development of a country. The studies of Greenwood and Jovanovic (1990) and Pagano (1993) have theoretically emphasised the impact of intermediaries that convert the savings into investment thereby leading to better allocation of capital. Similar such comments have been made in the research works of Outreville (1990) and Beck and Hebb (2003).

If we consider 'financial intermediaries', the first few names that come to our mind include banking, insurance, mutual funds, microfinance institutions etc. Hence, the importance of insurance has been duly acknowledged across the globe by policy-makers and researchers. The International Labour Organisation (2008) in a briefing note mention that insurance is considered to bring in funds that will stay in the long-term and will be stable for both financial markets and economy. Haiss and Kjell (2007) in their study show the positive effect of life insurance on the gross domestic product in fifteen countries of the European Union.

Insurance in India is not a new one. The industry has been in existence since the middle of nineteenth century and over time reforms have taken place to give a better shape to the industry and better regularise the sector. The nationalisation of life insurance industry that led to the formation of LIC in 1956 was done since the performance of provident societies was very poor with high operating expenses and huge policy lapses. Moreover, the industry business showed business concentration among certain business groups of the society because of their high-income profile. Since then, the insurer till 2000 operated as a monopoly player in the life insurance space in India. The story of deregulation in 2000 was in tune with the financial sector reforms that started in the early half of the 1990s after the New Economic Policy was implemented by the then Congress government. The insurance sector reforms that were brought about by the Malhotra Committee were aimed at "creating a more efficient and competitive financial system suitable for the requirements of the economy keeping in mind the structural changes currently underway and recognizing that insurance is an important part of the overall financial system where it was necessary to address the need for similar reforms…..". Since then, the industry has become vibrant with the entry of a large number of insurers. Hence, the monopoly status of LICI ended and it started losing some share of the market. No matter how much share it holds in the market, the role of LIC as an institutional investor has been phenomenal and unquestionable. The public sector insurer has been playing a very important role over the years since its establishment in 1956 in respect of making investments in different sectors of the economy, offering loans for different activities to different institutions and making investments in the share market and bond market. The total investment of LICI stood at Rs. 112.90 billion in 1986 which increased to Rs. 1390.32 billion in 2000 and currently stands at Rs. 19259.49 billion at the end of March 2016. Hence, in three decades, there has been a phenomenal increase in the contribution of LIC in different sectors and securities. The present study aims to gain insight into the pattern of investment of LICI in the pre- and post-crisis period.

II LITERATURE REVIEW

It is known to all that review of earlier studies is a must before one decides the line of thinking as without such understanding it is difficult to identify the research gap. It is necessary to ensure that there is no repetition of studies as the concept of research is about doing something new. A snapshot of the earlier studies is given here. Husain (2010) in the article "Growth of LIC of India during post privatisation period" makes a comparison of offices and discusses about the wide expansion that LIC has shown over the years. The performance parameters includes issue of new policies, premium underwritten, market share of LIC and different financial ratios. Kadam (2012) in the study "Life Insurance Corporation of India: A Giant in India's Insurance sector" looks at the progress and performance of its business in India with details about its revenue and its functioning in the global market. Nena (2013) in the research paper titled "Performance evaluation of Life Insurance Corporation of India" looks at the expense side of the business. Natarajan (2013) in the article "Determinants for evaluating Life Insurance Corporation of India" makes a comparative analysis of insurance density and penetration with growth rate of gross domestic product and gross domestic savings in India. Bawa and Chattha (2013) in their article "Financial performance of life insurers in Indian Insurance Industry" look at the growth of life insurance industry and business performance with respect to various ratios like current ratio, solvency ratio, return on asset and leverage ratio. Jena (2014) in the article "Financial performance of selected Indian life insurance companies" looks at five life insurers which include LICI, ICICI Prudential Life, SBI Life Insurance, HDFC Standard Life and Birla Sun Life. For performance analysis, the areas studied include liquidity ratios like current ratio, acid-test ratio, profitability ratios and growth in assets over the years. Bhagavathi and Revathy (2015) in their article "Performance of Life Insurance Corporation of India" look at various parameters at the international arena to understand the growth in insurance premium and position of various economies in terms of insurance penetration and density. For the assessment of LIC's performance, a discussion is made about performance areas that include number of policies issued, new business, increase in sum assured, number of active agents, settlement of claims and commission paid to agents. Singh (2015) in the article "A study on financial performance of Life Insurance Corporation of India" looks at the expense side of the business. Dolai (2015) in the paper "Managing performance for business development in case of LICI" look at the growth in business, the life fund and sum assured on new policies. Manivannan and Karunanithi (2015) in their article "A study on micro life insurance products of LIC of India in Vellore division, Tamil Nadu" look at the micro-insurance portfolio of LIC of India and analyse its performance in terms of growth in first premium income. Siddiq (2015) in the article "Impact of work stress on LIC employee's performance: A study with reference to Mangalore Taluk" looks at the work stress level for employees and identifies the determining factors that influence such work stress satisfaction. Paramasivan and Anand (2016) in their article "Marketing problems of LIC agents" focus on the problems faced by the agents of LIC in selling their products to different categories of customers. Raghavendra and Gopanapalli (2016) in their article "A study on HRM practices in Life Insurance Corporation of India" look at the employee response on HRM practices. Mallick et al. (2017) in their article "Financial performance of life insurance companies and its impact in Indian economy" look at the growth in number of offices and development in the country with respect to life and non-life insurance business. Agarwal and Mishra (2017) in their article "Life insurance industry of India – Past, present & future" look at the post-nationalization trend and growth of LIC in the post-LPG (liberalisation, privatisation and globalisation) era apart from highlighting the future trend of its business in the country.

(a) Research gap-The above summarisation about various studies on LIC shows that there have been several researches already made on this public sector giant that cover various important aspects. A snapshot of the literature shows that the different areas which are already explored include the aspect of marketing, human resources related aspect, financial aspect in which the focus is on growth in business/market share/premium, ratio analyses, analysis of the expense side of business, impact of insurance companies on the Indian economy, growth and prospects of LIC and progress of the insurance industry and micro-insurance portfolio of the insurer.

The present study plugs one such area that has not been researched upon intensively. Hence, an endeavour is made to add further to the existing depth of knowledge by studying the issue of investment made by LIC across different sectors and instruments.

III OBJECTIVES OF THE STUDY

The main objectives are:

(a) To study the investment pattern and growth across different sectors and investment instruments.
(b) To identify the relationship between share market movement and investment in stock market related instruments.
(c) To check for structural break in the investment as a result of 2008 financial crisis.

IV RESEARCH DESIGN

In any research, there has to be a design that will lay the foundation and determine the strength of the research. For the purpose of this investigation, the following design is made:

(a) The study covers a period of fourteen years from 2003-2016.
(b) The study breaks the study period into two sub-periods namely pre-crisis period from 2003 to 2009 and post-crisis period from 2010 to 2016.
(c) The entire study is based on secondary data that is collected from the RBI.
(d) For meeting the objectives of this study, the research methods that are employed include growth analysis, mean difference test, bivariate correlation, trend analysis using semi-log linear method and Chow test for testing any change in the growth during the two sub-periods.

The semi-log method for determining growth is represented as:

ln (Yt) = a+bt, where Y is the variable whose growth is calculated, t is the time represented by 1, 2, 3,....etc and b is the growth rate.

In Chow test, the null hypothesis is that there is no structural break during the study period.
The procedure for application of this test is given below.

Let RSSp be the sum of squared residuals from the pooled data, RSS1 be the sum of squared residuals for the first sub-period, and RSS2 be the sum of squared residuals for the second sub-period. Also suppose that n1 and n2 are the number of observations in each sub-period and k is the total number of parameters.

The Chow test statistic which follows the F-distribution is calculated as:
F = [RSSp – (RSS1+RSS2)]/k ÷ (RSS1+RSS2)/(n1+n2-2k).

If the calculated value of F-statistic exceeds the table F-value, null hypothesis is rejected at the set α level. The α level for this study is set at 5%. For this study, n1 is seven, n2 is six and k is two.

V ANALYSIS AND FINDINGS

(a) Distribution of LIC investment across sectors

The table below shows the distribution of investment across different sectors in the country.

Table 1
Distribution of LIC investment across sectors

(all figures are in Rs. bn)

Year	Inv. in Pub. sector	Inv. in Pvt. sector	Public + Pvt. Sector	Inv. in Jt. sector	Inv. in Co-op. sector	Total
(1)	(2)	(3)	(4) = (2) + (3)	(5)	(6)	(7)
2003	2195.97 (87.22)	294.07 (11.68)	98.90	6.85 (0.27)	20.82 (0.83)	2517.70
2004	2717.79 (83.18)	519.24 (15.89)	99.07	9.60 (0.29)	20.80 (0.64)	3267.41
2005	3220.22 (81.90)	684.85 (17.42)	99.32	12.70 (0.32)	14.08 (0.36)	3931.85
2006	3788.07	1051.48	99.33	19.15 (0.39)	13.56 (0.28)	4872.27

	(77.75)	(21.58)				
2007	4338.10 (83.15)	842.94 (16.16)	99.30	0.75 (0.02)	35.55 (0.68)	5217.35
2008	5033.88 (79.18)	1284.68 (20.21)	99.39	0.74 (0.01)	38.18 (0.60)	6357.48
2009	5720.50 (74.98)	1871.41 (24.53)	99.51	0.72 (0.01)	36.29 (0.48)	7628.92
2010	6783.74 (73.88)	2361.35 (25.72)	99.59	0.71 (0.01)	36.67 (0.40)	9182.47
2011	7990.09 (74.65)	2675.18 (25.00)	99.65	0.82 (0.01)	36.67 (0.34)	10702.76
2012	8996.55 (74.73)	3005.10 (24.96)	99.69	0.85 (0.01)	35.67 (0.30)	12038.18
2013	10187.81 (75.52)	3293.08 (24.41)	99.93	0.86 (0.01)	8.22 (0.06)	13489.96
2014	11942.61 (79.03)	3160.24 (20.91)	99.94	0.94 (0.01)	7.54 (0.05)	15111.33
2015	13697.13 (80.17)	3379.97 (19.78)	99.95	0.94 (0.01)	6.85 (0.04)	17084.89
2016	15788.42 (81.98)	3458.52 (17.96)	99.93	0.96 (0.00)	11.59 (0.06)	19259.49
SD	4286.98	1184.67	-	5.85	12.79	-
Mean	7314.35	1991.58	-	4.04	23.04	-
CoV	0.59	0.59	-	1.45	0.56	-

Source: Computed by the researchers

Figures in the parentheses represent percentage share.

The computation in the above table shows that the values of coefficient of variation are very low thereby throwing light on the fact that things have not changed much over the years in terms of share of the total investment made. The overall pattern has remained the same during the study period.

The following observations can be made from the above table.

(i) **Investment in public sector:-** From 2003 to 2016, it is obvious that the year-on-year investment is increasing. But if we look at percentage of investment by LIC in the public sector, then it can be commented that from 2003 to 2006, there is a downward move in the trend of investment. In 2007, though the percentage of investment increases to 5.4%, between 2007 and 2010, there is a down-pulling effect as before. After the financial crisis of 2008, the percentage of investment in the public sector shows an uptrend from 2010 to 2016. The mean share of investment in the public sector stands at 79% which shows the kind of support that LICI provides by making investments in these sectoral units.

(ii) **Investment in private sector:-** On the basic of the above computation, it can be mentioned that the investment in private sector shows an year-on-year rise in all but two years, viz. 2007 and 2014. If we look at the percentage of investment, it is evident that during the initial years from 2003 to 2010, the trend shows an increase with a break in 2011 after which there is a continuous rise, though it is marginal. If we only look at private sector investment, an average of 20.44% is invested by LIC in this sector. Hence, the share of investment in the public and private sector combined stands close to 99 percent.

(iii) **Investment in joint and cooperative sectors:** It is clear that since more than 99% goes to the public and private sectors, a meagre one percent goes to these two sectors. The average share of LIC's investment in the joint sector is a paltry 0.1% which is slightly lower than the 0.36% share towards the cooperative sector.

Thus, the above analysis shows that LIC's investment is concentrated mainly in the public sector, more so it being an insurance company set up under an Act of Parliament. The private sector investments have also been substantially high. The remaining two sectors attract negligible amounts of investment from the insurance giant. The value of coefficient of variation in all the cases shows that it is quite low which points to a low dispersion and thus points to a similar trend throughout the period.

(b) Pattern in LIC investment across different instruments

This sub-section looks into the investment by LIC across different instruments.

Table 2
Share of LIC investment across instruments

Year	Inv. in stock exchange securities	Loans
2003	88.65	11.35
2004	91.07	8.93
2005	90.45	9.55
2006	92.47	7.53
2007	92.08	7.92
2008	92.88	7.12
2009	93.82	6.18
2010	94.97	5.03
2011	95.91	4.09
2012	96.56	3.44
2013	96.91	3.09
2014	97.20	2.80
2015	97.63	2.37
2016	98.19	1.81
SD	3.05	3.02
Mean	94.18	5.83
Coefficient of variation	0.03	0.52

Source: Computed by the researchers

The observations from table 2 are given below.

(i) Investment in stock exchange securities:- On the basis of the above table, it can be said that percentage of investment in stock exchange securities shows a rise in 2003 and 2004 after which there is a decline, though short lasting. From 2006 to 2016, there is a continuous upward trend with a share of 98.19 percent in 2016. The average investment in stock exchange securities stands at 94.18 percent.

(ii) Investment in loans:- In comparison to the investment in stock exchange securities, the investment in loans is quite low. An overall observation shows that there is a slow downtrend during the period of study which is in contrast to the slow but steady increase in the case of stock exchange securities.

(c) Relationship between 'market' and LIC's investment

In this sub-section, the researchers draw a relationship between movement in capital market and investment of LIC in stock exchange securities. For the purpose, the investigators use the Nifty and Sensex as proxies for the capital market.

Table 3
Correlation between capital market movement and SEIS

Variable of interest	SEIS
Nifty	0.886*
SENSEX	0.878*

Source: Calculated by researchers

SEIS stands for stock exchange investment in securities

The result shows that in both the cases the relationship is highly positive and also significant at 1% level. The strength of relationship with Nifty and Sensex shows a value of 0.886 and 0.878 respectively. Thus, this can be interpreted as an increase in the investments in the stock market securities with upward movement in the capital market. Similarly, there has been a severe cutting in the investment in case of a falling market.

(d) Growth of LIC investment

In this section of the research, the year-on-year growth and trend equations are arrived at for different cases of investment.

Table 4
Year-on-year growth of LIC investment
(figures are in %)

Year	Investment in public sector	Investment in pvt. sector	Investment in jt. sector	Investment in coop. sector	Total
2003	NA	NA	NA	NA	NA
2004	23.76	76.57	40.19	-0.13	29.78
2005	18.49	31.89	32.37	-32.28	20.34
2006	17.63	53.54	50.76	-3.71	23.92
2007	14.52	-19.83	-96.08	162.17	7.08
2008	16.04	52.40	-1.33	7.40	21.85
2009	13.64	45.67	-2.70	-4.95	20.00
2010	18.59	26.18	-1.39	1.05	20.36
2011	17.78	13.29	15.49	0.00	16.56
2012	12.60	12.33	3.66	-2.73	12.48
2013	13.24	9.58	1.18	-76.96	12.06
2014	17.22	-4.03	9.30	-8.27	12.02
2015	14.69	6.95	0.00	-9.15	13.06
2016	15.27	2.32	2.13	69.20	12.73

Source: Computed by the researchers

(i) (**Sector-wise analysis)**

- **Investment in Public sector:-** On the basis of the above table, it can be said that from 2004 to 2007, there is a rise. In 2008, the year-on-year (yoy) growth increases to 16.04% from 14.52% but it dips again in the following year following the financial crisis. Though there are years of rise and fall, the overall trend shows a rise during the period.
- **Investment in Private sector:-** With respect to LIC's investment in the private sector, during the study period, it is observed that during the initial years of the study period, the y-o-y growth is quite high which however declines substantially during the latter half of the period. Till 2009, the y-o-y growth rates were very high with maximum and minimum being 76.57% and 31.89% (not considering the negative growth in 2007). From 2010, following the financial crisis, the year-on-year growth declines considerably and that too following a similar trend throughout.
- **Investment in joint sector:-** In the joint sector, during 2007 to 2010, there is a negative growth. The computation shows that in the early

years there has been a substantial rise year-on-year. But, in the recent years, either there has been a decline or the growth rate is low.

- **Investment in co-operative sector: -** On the basis of the above table, it can be remarked that in most of the years there has been a decline from the previous year. Thus, there is a downward overall trend.

(ii) Test for difference in the growth rates in the different sectors

From the nominal figures, it is evident that there is a significant difference among the sectors. Hence, for a better understanding, the researchers look at the year-on-year growth rate on which the hypothesis is tested. The null hypothesis (H0) is: There is no significant difference in investment flow across the sectors.

The alternate hypothesis (H1): There is significant difference in investment flow across the sectors.

Table 5
ANOVA result based on year-on-year growth of investment

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2987.850	3	995.950	.782	.510
Within Groups	61129.514	48	1273.532		
Total	64117.364	51			

Source: Computed by the researchers

The result for anova shows that there is no significant difference among the sectors in respect of their growth during the period as evident from the p-value of 0.510 for the F-statistic having a value of 0.782.

(iii) Instrument wise analysis

The analysis looks into the flow of LIC's investment into different securities which are divided into stock exchange securities and loans.

Table 6
Year-on-year growth of LIC investment (instrument-wise)

Year	Investment in Stock exchange securities	Loans	Total
2003	NA	NA	NA
2004	33.77	15.47	29.78
2005	19.51	18.02	20.34
2006	26.69	-1.05	23.92
2007	6.63	11.24	7.08
2008	22.91	9.62	21.85
2009	21.21	4.20	20.00
2010	21.85	-2.81	20.36
2011	17.71	-4.52	16.56
2012	13.24	-5.38	12.48
2013	12.47	0.57	12.06
2014	12.36	1.40	12.02
2015	13.56	-4.27	13.06
2016	13.38	-13.98	12.73

Source: Computed by the researchers

- **Investment in stock exchange securities:-** On the basis of the above table, a look at the y-o-y growth of LIC's investment in stock exchange securities reveals that during 2004 to 2016, in some of the years, there is a decline and increase otherwise. A noticeable point is the low rise in 2007 which however improves substantially after that. Overall, we observe that the rate of increase over the previous year shows a slow decline in nominal figures.
- **Investment in loans:-** The figures show that in 2006 and from 2010 to 2012 and 2015 to 2016, there is a negative growth on a year-on-year basis. An observation is that though there has been a rise in the earlier years, in recent years there are declines in most of the years.

Table 7
Test for difference using Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig.	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference Lower	Upper
Var. 1	Equal variances assumed	.748	.396	4.901	24	.000	15.906	3.245	9.207	22.605
	Equal variances not assumed			4.901	22.77	.000	15.906	3.245	9.188	22.624

Source: Computed by the researchers

- **Variable used:** year-on-year growth of investment across the two categories of securities

The result of the t-test shows a statistically significant difference in the growth for the two categories of securities at 1% level as evident from the p-value of 0.000.

(e) Tracing the growth in LIC investment

In this section, the researchers derive the trend equation for the different variables considered important for the study. Since financial crisis was a major economic event that shook the world, the growth rates are calculated for the pre-crisis, post-crisis and the entire period.

Table 8
Growth rates of LIC investment

Sl. no.	Variable	Pre-crisis period	Post-crisis period	Pooled period
Sector-wise investment				
1.	Investment in Public sector	15.7%* (27.721)	13.8%* (46.504)	14.8%* (78.155)
2.	Investment in Private sector	27.0%* (7.365)	4.6%* (4.207)	18.3%* (10.343)
3.	Investment in joint sector	-52.5% (-2.632)	3.4% (6.713)	-21.0%* (-3.424)
4.	Investment in co-operative sector	13.6% (1.963)	-30.8%*** (-2.224)	-6.4% (-1.540)
Security-wise investment				
5.	Investment in stock exchange	18.5%* (17.487)	12.2%* (131.941)	16.1%* (32.275)
6.	Investment in loans	8.6%* (9.616)	-3.5%*** (-2.708)	1.6% (1.765)

Source: Computed by the researchers

* significant at 1% level, and *** significant at 10% level

Figures in the parenthesis are values of t-statistic.

(i) Growth of investment in public sector: As per the trend equation, it is observed that the growth in investment of 15.7% during the pre-crisis period is the highest. There has been a substantial decline in growth to 13.8% during the post-crisis years. The computation on pooled data reveals a growth of 14.8% which is comparatively good.

(ii) Growth of investment in private sector: There is a remarkable change in trend with respect to LIC's investment in the private sector. In the pre-crisis years, the growth was at a phenomenal rate of 27% which dipped drastically to a mere 4.6% during the post-crisis years. This might be due to extra caution by LIC strategists to limit investment in the private sector following the crisis and falling share market. However, the overall growth is 18.3% which is due to the contribution in the pre-crisis period.

(iii) Growth of investment in joint sector: The investment pattern in the joint sector is in sharp contrast to that in the public and private sectors. During the pre-crisis period, there is a severe dip in the investment with a negative growth of 52.5%. Following the crisis, there was a slow growth of 3.4% till 2016. The overall scenario shows investment into this sector to be poor with an overall decline of 21%.

(iv) Growth of investment in co-operative sector: The trend in investment flow of LIC to this sector does not match the pattern as seen in the other cases. The dis-similarity is due to the fact that during the pre-crisis period, there is an increase in the flow which however came down sharply during the post-crisis period. The overall growth is negative at 6.4%.

(v) Growth of investment in stock exchange: The computation shows that there is a sharp decline in flow of investment to stock exchange-based securities. During the pre-crisis period, there is a growth rate of 18.5% which declines to 12.2% after the crisis. The overall growth rate is seen at 16.1%. The pattern is a reflection of avoiding investment in the stock-exchange based securities following the sharp beating of the market due to the financial crisis. It was the period when the stock markets across were in a shattered state and there was a natural tendency among individual and institutional investors to avoid share market and debt market.

(vi) Growth of investment in loans: A look at the growth rates during the pre- and post-crisis period shows that there is a drastic fall in terms of investment as loans by LIC. One of the probable reasons could be the falling interest rate across markets which automatically led LIC to make investments in avenues that can generate higher returns.

(f) Test for structural break

In this part of the analysis, effort is made to identify whether the growth equation for different variables shows a structural break after the occurrence of the financial crisis of 2008, a major event that had a severe down-pulling effect on the global economic growth and different economies.

The hypothesis tested is:
The null hypothesis (H0): There is no structural break during the study period.

Alternative hypothesis (H1): There is a structural break during the study period.

For the purpose, the year for break is considered as 2010 intentionally to allow for the effect of 2008 to slowly trickle down before the event holds a grasp on the operational performance. The test for structural break is done using the Chow test which is based on F-statistic. The basic fundamental of this test is that it considers the growth during the two sub-periods individually and entire period as a whole and compares them to find whether there is any structural break.

The results of the test are given below.

Table 9
Results of Chow Test for Structural break for different investments of LICI

Investment Variable	F-statistic calculated	Inference
In public sector	3.181	The null hypothesis is not rejected. There is no structural break
In private sector	14.981	The null hypothesis is rejected at 1% level of significance
In joint sector	3.743	There is no structural break

In cooperative sector	5.965	There is structural break at 5% significance level
In stock exchange securities	14.639	The null hypothesis is rejected at 1% level of significance, thereby pointing to a structural break
In Loans	43.361	The null hypothesis is rejected at 1% level of significance

Source: Calculated by the authors

$F_{2,9,0.01} = 8.02$, $F_{2,9,0.05} = 4.25$

VI CONCLUSION

The focus of the study is the investment trend followed by LIC during the period 2003 to 2016. This period is a span of fourteen years which covers both pre-financial crisis period and the post-financial crisis period. It is interesting to note the trend in investment by LIC across different sectors and investment securities. The analysis of data shows that with regard to sectoral investment, the public sector units take the major chunk of its total investment portfolio with a mean of close to 80%. The share of the private sector stands at around 19% and the remaining 1% goes to the joint and cooperative sectors. A look at the year-on-year growth aspect shows that though there have been ups and downs, the overall curve is an upward going line for the investment in public sector. With regard to private sector investment, it is evident from data that though the growth was reasonably at a good rate till the year of financial crisis, after that there has been a considerable decline which followed the same trend till 2016. For a statistical inference on the growth pattern, the mean test shows that there is no statistical difference in respect of ‘growth’ variable during the study period. Hence, it can therefore be remarked that though there is a difference in terms of nominal values, the growth aspect does not differ considerably in statistical parlance.

The second focus on investment in the study is the investment in securities and disbursement of loans. The growth of investment clearly points to the fact that after the financial crisis there has been a dip in the investment in stock-market based securities which shows the tendency to show lesser interest in capital market investments following the blood bath in financial markets across the globe. The final part of the study about structural break gives interesting results. The results show that in the cases of investment flow to the private sector, cooperative sector and in stock-exchange base securities and loans, there are a significant change / shift in the pattern of growth between the pre- and post-crisis period. Thus, the overall study shows that there has been an impact on the flow of investment of LICI during the study period. Hence, the financial crisis can be considered to be a major event that changed the pattern of flow of money to different sectors and instruments.

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