

## IMPACT OF LIBERALIZATION ON THE LIFE INSURANCE SECTOR IN INDIA

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### ABSTRACT

*The biggest metamorphosis in Indian economic climate came in June 1991 with the wave of economic liberalization. The government of India recognized the need to address the introduction of liberalization in insurance industry as an important step for overall development of financial system of India. The boom in financial market and the reforms facilitated over the past decades in the life insurance industry has ignited the engine of economic growth in India. The de-monopolization of the industry and bringing new features into, it has been serving its primary objective of mobilization of savings with insuring lives well appropriately. Since then it has developed itself with various innovative and sectoral transformation as per the need of the hour. An appraisal of the industry reveals its developmental journey since liberalization by creating a supportive environment for pension, healthcare sector and extending social security net amongst all from the classes to the common masses. The liberalization has introduced foreign participants in the market which has induced competitive environment in the industry. The key reform initiation of 1991 has propelled the insurance sector that, today life insurance business of India has been ranked 10<sup>th</sup> among the 88 countries. The present study is conducted to highlight the growth and performance of Indian life insurance sector by making comparative analysis of pre and post liberalization period. For the same, four indicators are used to drive conclusion based on statistical techniques.*

**Keywords:** Liberalization, Total premium, Policies, Density, Penetration, Paired t-test.

### Introduction

Life insurance sector of India being an indispensable part of service sector has shown its true colour after the de-monopolization policy of the Indian government. The government of India under the recommendations of Malhotra committee started its restoration by commencing the entry of private companies into the insurance industry. This is a paradigm shift in the history of insurance sector. The committee stressed on the overall growth process of insurance sector specifically transforming it into insurance for masses from insurance for classes. The committee urged the insurance companies to abstain from indiscriminate recruitment of agents, and stressed on the desirability of better training facility, and closer link between the emoluments of the agents and the management and the quantity and the quality of business growth (Bhaumik, 1999). The basic philosophy underlying this is to improve the productivity and efficiency of the system. This is sought to be achieved partly by creating a more competitive environment as it is believed that the growth of the real economy depends upon the efficiency of the financial sector. The opening of the door has been seen as creating more opportunities both for private players in India and the common masses in the sense of varieties and choices of products. Accordingly, there are high expectations of investments, market efficiency, product innovation and a more robust framework.

After opening up and adopting due process of liberalization in 1999, the industry saw few changes in its operational process and structural changes in business. The IRDA bill was passed in 1999 and become an Act in 2000, allowing overall ceiling of 26% for foreign stakeholders in domestic companies. The entry of private players was allowed not due to low level of penetration and life insurance density, non-availability of customer centric products, higher premium and lower service quality on the part of insurers but it was a common belief that the opening domestic economy has the tendency to higher growth rates and saving rates. Further, the participation of foreign players would make the market more competitive which would ultimately improve the quality of services offered by all insurers in the market.

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The Life Insurance Corporation of India (LIC) the sole public sector company in India was previously enjoying monopoly over the market. This is after the liberalization of life insurance sector that its market share has reduced tremendously. However, analysing the whole industry since liberalization, it has shown a significant growth with each passing year and now turned into a major channel of economic growth. For the first five years, the life insurance sector premium grew at CAGR of 24.13% from 2001 to 2005. It was due to the growing awareness among consumers for need of life insurance plus plethora of innovative products had been launched during the period. While, the CAGR of next five years accounted was 25.83%. However, the growth was positive but less than expected due to global recession of 2008-09. The life insurance market grew from US\$ 10.5 billion in fiscal year 2002 to US\$ 54.6 billion in fiscal year 2016 and to 64.92 US\$ in 2017. During 2016-17, private sector life insurers recorded premium of Rs. 18.31 US\$ billion. While, LIC, the sole public sector life insurance company recorded premium of Rs. 46.61 US\$ billion.

The total number of offices in India reported is 10954. It is said that the establishment of number of offices in India will have direct impact over the common masses to raise the demand for life insurance. In 2007-08, the growth rate of number of offices was 65.88% over the previous year. Out of the total establishments (8913), the private sector held 6391 offices while the figure for the LIC was 2522. Further bifurcation, revealed that 10.53% of number of offices were situated in metro cities, 18.36% and 39.72% life insurance companies were operating in urban and semi urban cities respectively. The others show those places which do not fall under these and have occupied a greater share of 31.38% out of the total offices in the industry. Accordingly, the IRDA initiated some rules that every life insurance company has necessary business obligation towards rural and social sector to operate in India. This rule was established in recent years after observing the negligence of private players not exploring their business in rural sector and concentrating themselves to only urban and metro cities of India. Nevertheless, the semi urban region is the most concentrated by these sectors and less affection is given to rural sector. The offices situated in rural sector are 4-5% of the total industry.

Till March 2018, there are total 24 life insurance companies operating in India. Of which, 23 are private players and one is public sector company. Insurance Regularity Development Authority of India (IRDAI) is the sole regulator to control, promote and ensure orderly growth and performance of Indian insurance industry. Post liberalization, the foreign players entering in India are allowed to collaborate domestic players with 26% of FDI cap in initial years. Now, this limit of capital contribution has been raised to maximum of 49% of capital in the joint venture.

This study will highlight the post liberalization picture of life insurance sector in India whether the objective behind the liberalization process laid down by the Indian policy makers is on the right direction to be achieved. Therefore, this paper will evaluate the growth and performance of life insurance sector in the background of post effects of liberalization.

### Review of Literature

**Yaari (1965)** and **Hakansson (1969)** were the pioneers who developed a theoretical framework to describe the notion of demand for life insurance. They tried to explain the need of life insurance in one's life through life cycle model. In their life cycle approach, they retained that an individual is obliged to purchase life insurance due to uncertainty about lifetimes and that this uncertainty impacts life insurance consumption of individuals. The consumption of life insurance is simply based on a person's desire to let up adequate income for its dependents and also to enhance income for its retirement. So, the consumer tends to maximize this expected utility subject to health of the individual, expected income over his lifetime, interest rates and also costing of life insurance policies. Yaari used a continuous time model in his time theory while, Hakansson used discrete time model to postulate the same interpretation that individuals expected life time utility is surrounded by uncertainty about the time and bequest motives.

**Lewis (1989)** extended Yaari's theoretical construction of life insurance by considering other dependent members as new variables and incorporating their preferences in the model. He applied utility maximization concept and concluded that there exists strong correlation between number of beneficiary dependents and life insurance consumption and that purpose of purchasing life insurance is to maximize the expected life time utility of beneficiaries.

**Verma & Bala (2013)** tried to investigate statistical significance of Indian life insurance industry in economic growth of the country. For robust results showing causal relationship they used life insurance premium and life insurance investment as representative of insurance and GDP as representative of economic growth and employed ordinary least square regression method for analysing time series data from 1990-91 to 2010-11. The results of the empirical evidences generated from the model shows that

life insurance has positive significant effect on the Indian economic growth that a unit increase in life insurance premium the GDP of the nation increases by 0.57 unit and one unit increase in life insurance investment makes the GDP to grow by 3.43 units. The result of the model confirms the estimated coefficient is unbiased and efficient.

**Bhatnagar, Chauhan & Banerjee (2016)** tried to figure out the role of insurance sector in economic growth of the India in their study. There is great potential to maximize insurance penetration in the country and is expected to reach 5 percent with market size of US\$ 350-400 billion by the year 2020. The industry requires maintaining consistent growth in near future and a framework with more transparent and flexible policies to achieve the desired goals. The regulatory authorities should introduce simple and less complex insurance policies to create greater awareness among customers and should make buying life insurance policy mandatory.

**Kumari (2013)** evaluates the impact of liberalization on Indian life insurance industry on the basis of indicators such as first year premium, number of offices, new policies issued, market share, insurance density and penetration. After taking step for advancement of insurance sector, the liberalization has phenomenal effect on its structure and growth of its business. The private sector has successfully made its count to 23 companies with a market share of 29 percent in the total business of the industry. It has chucked out the traditional cases of limited policies and premium income.

**Chowdhary (2016)** talked about the structural changes in the history of insurance sector since its inception in India. From the state of monopoly to freeing the industry, the division of market share after the potential entry of private sector, now, is in the ratio of 70:30. The launching of the private players has not made much impact on the overall insurance penetration and density level of the country. It is still below average of the world.

According to **Arena (2008)**, after the process of integration and de-monopolization, there has been seen growth in emerging nation's insurance market activities. The author investigated the causal relationship between insurance market activities and economic growth in 55 countries over a period from 1976 to 2004. It applied Generalized Method of Moments (GMM) for dynamic models of panel data to examine the relationship.

**Singh (2007)** stated that the liberalization of the economy has changed the landscape of the economy. The regulators by introducing it, has started a game which should be effectively managed and monitored. The progress is inestimable on the side that the new entrants have come up with immediate benefits plan to its customers. The market place is now a competitive one exhibiting a proper balance between saving protection plans and investment plans unlike that of traditional policies. there is wide range of products, extended coverage, option of customization is available and above all people are becoming aware of life risk and benefits of insurance. The behemoth life insurance has also now exploring its wings to catch up heights marked by the private companies. It can be concluded that insurance being the pillar of financial system have witnessed positive growth in its business.

**Arif (2015)** in his study tried to evaluate the growth pattern of life insurance business in India. The study covered a period of 10 years from 2003-04 to 2012-13. After liberalization there have been seen an increasing trend in terms of total premium underwritten, new policies issued, number of offices established and market share of private life insurance companies. The study empirically carried out inters relationship between total premium and offices and policies issued by the life insurance sector.

**Rao (2015)** analysed the overall impact of liberalization on life insurance sector. The performance of LIC as alone public sector Company is falling in terms of business and market share and private companies, giving tough competition to LIC are growing faster. During the period of study from 2001-2010 the private companies are increasingly growing its business and are coming up with new and innovative products and better customer services.

**Prakash (2016)** discussed the market strength of public and private sector life insurance companies judged on the basis of market share of various types of premiums viz. single, renewal, regular, first year and total premiums collected during the period of study (2010-11 to 2014-15). T-test has been applied to make comparison between public and private sectors and concluded that there is significant difference found in between premiums of public and private sectors.

### **Objectives**

The aim of the study is to highlight the growth prospects and expansion in the life insurance sector after the commencement of liberalization through various measuring variables. The process of de-monopolization of the sector has opened up wide vistas for private companies to operate and perform in

India which helped in socio-economic configuration of Indian society also. So, the paper will measure the effects of incorporation of liberalization and privatization in Indian economy which is assumed to ignite the engine of growth in insurance sector. The aim of the paper is to compare the transition period of pre and post effects of liberalization on life insurance sector by employing developmental indicators to measure the growth of the same. It will also depict an overall picture of post liberalization growth structure of Indian life insurance industry.

### Null Hypothesis

**H<sub>0</sub>:** There is no significant change in the performance of life insurance sector of India after liberalization.

### Data and Methodology

The null hypothesis is tested to examine whether the performance indicators of Indian life insurance sector after liberalization are significantly higher than those before the process of liberalization. The Paired t test has been reported to make conclusions regarding the null hypothesis. Moreover, the normality of data has been checked by using Jarque-Bera(JB) Test. The period under consideration is from 1984-85 to 2016-17 categorizing it into Pre-liberalization period from 1984-85 to 1999-2000 and Post- Liberalization period from 2001-2002 to 2016-17. The major indicators to show statistical improvement in between Pre and Post Liberalization taken are Total premium, Policies issued, Insurance Penetration and Density. The data to carry out this study has been collected from annual reports of LIC, Swiss re and various issues of IRDAI- Handbook on Indian Life Insurance Statistics.

### Findings and Analysis

The descriptive analysis involves description of data in terms of frequencies, proportions, mean, median, quantities, standard deviation, inter-quartile range etc. (Hussain, 2012). The descriptive statistic as shown is computed using EViews version 10 and MS Excel which describe the values of mean, standard deviation, skewness, kurtosis, minimum and maximum value. The Growth rate of overall periods has been obtained through calculating Compound annual growth rate (CAGR) and variation through Coefficient of Variation (CV) considering two periods Pre-liberalization and Post liberalization.

### Growth of Total Life Insurance Premium Business

The mean and relative measures of total premium underwritten by life insurance industry for both periods are presented in table 1. The total premium income which is considered as major performance indicator of life insurance business was 1559.13 crore (minimum value) in the year 1984-85. It managed to earn maximum premium of 27461.7 crore during pre-period. This period seemed to have fluctuating trend in total life insurance premium. The highest growth rate 30.78% was reported in the year 1989-90 and lowest in 1996-97 with 15.30% rate of growth only. With regard to post liberalization, the industry reported a declining trend over this period. The year 2011-12 has even seen negative growth rate -1.57%. However, the post period starting from 2001-02, showed tremendous growth of 43.54% over previous year. Subsequently, this growth rate then declined to 4.49% in 2014-15. In the year 2016-17, it showed a rise in its premium value and growth rate stood at 14.04%. The major causes for declining values of premium as perceived are increased competition witnessed between LIC (public player) and private players and tough contest among private life insurance companies itself which has also decreased the state-sole dominancy of LIC over the life insurance industry.

The overall growth rate estimated by CAGR is accounted to be lesser in case of post liberalization period (15.202%) than the pre-liberalization phase (21.07%). Though, there can be seen declining behaviour of total premium after liberalization phase, the mean value of post phase 218726.44 crore is greater than the pre-phase mean value 9868.26 crore. In terms of minimum and maximum values also post phase shows higher figures than the pre-phase.

**Table 1: Total Premium in Pre and Post Liberalization Period**

Pre-Liberalization			Post Liberalization		
Years	Total Premium (in crore)	Growth rate (in %)	Years	Total Premium (in crore)	Growth rate (in %)
1984-85	1559.13	-	2001-02	50094.46	-
1985-86	1782.28	14.31	2002-03	55747.55	11.28
1986-87	2097.21	17.67	2003-04	66653.75	19.56
1987-88	2671.88	27.40	2004-05	82854.8	24.31
1988-89	3432.72	28.48	2005-06	105875.76	27.78
1989-90	4489.39	30.78	2006-07	156075.84	47.41
1990-91	5600.80	24.76	2007-08	201351.41	29.01

1991-92	6959.92	24.27	2008-09	221785.47	10.15
1992-93	7987.24	14.76	2009-10	265447.25	19.69
1993-94	9735.32	21.89	2010-11	291638.64	9.87
1994-95	11527.80	18.41	2011-12	287072.11	-1.57
1995-96	14181.77	23.02	2012-13	287202.49	0.05
1996-97	16351.39	15.30	2013-14	314301.66	9.44
1997-98	19252.07	17.74	2014-15	328102.01	4.39
1998-99	22805.80	18.46	2015-16	366943.23	11.84
1999-00	27461.70	20.42	2016-17	418476.61	14.04
CAGR	21.07			15.202	
MEAN	9868.26			218726.44	
Standard Deviation	8064.458			115483.44	
KURTOSIS	2.556			-1.274	
SKEWNESS	0.8294			-0.103	
Minimum	1559.13			50094.46	
Maximum	27461.7			418476.61	
CV	81.72			52.798	
J-B Test	1.966			1.0852	
P-value	0.3741			0.5812	
Paired t Test Value	<b>7.471 (sig at two tailed= 0.000)</b>				

Source: Computed

Kurtosis shows the shape of distribution or peakedness of a given distribution. It depends on the value of coefficient of kurtosis. If the value is greater than zero, the shape of distribution is leptokurtic and is positive. If the value is less than zero then the shape occupied is platykurtic and is negative. Further, if it assumes value equivalent to zero then the distribution is said to have normally distributed data with mesokurtic shape. On the other side, skewness shows how symmetrical is the distribution. A symmetrical distribution is that which have skewness value equals zero. An asymmetrical distribution has two cases- negative skewness and positive skewness. Positive skewness is when, the curve is extended to the right side with mean>median>mode while, in negative skewness situation, the curvy part lies on the left side and here mode>median>mean.

Another arithmetical evidence for detecting skewness is standard deviation. The variability in a given data is also measured by the standard deviation which shows how widely the values are dispersed from the mean. So, standard deviation is an index which simply explains the distance of given values from the mean. The standard deviation has increased in post liberalization period to 114914.4 crore from 8064.458 crore in pre-liberalization period. Further, the assessment of normality of pre and post data of total premium underwritten is done through Jarque-Bera test. In terms of total premium, the data is found to be normally distributed at 0.05 level of significance. The Paired t test is carried out to analyse the mean difference between the two period under consideration plus to test whether liberalization has changed the performance picture of industry or not. The value of Paired 't' test is 7.471 at two tailed at 0.05 level of significance with 15 degree of freedom. The t test, statistic > t critical value, which shows a significant difference between both the periods. Hence, the result concludes that there is significant difference between the total premium of pre-liberalization and post liberalization. Thus, the null hypothesis that *there is no significant change in the performance of life insurance sector of India after liberalization stands rejected or not accepted.*

#### **Growth of New Policies Issued**

It is clear from the table2 that the number of policies issued before liberalization were 27.02 lakhs in 1984-85 which increased to 169.99 lakhs at the end of the year 1999-2000 (pre-liberalization phase). These are also minimum and maximum values that were recorded before the advent of liberalization. After liberalization, there has been seen a constant increment in number of policies issued by the life insurance industry as a whole. The highest policy growth rate is achieved in the year 2009-10 with 532.25 lakhs policies issued. Due to global economic crisis in 2008-09, its impact also generate recession in Indian economy. This causes a downfall in the overall demand for life insurance products and subsequently, decline in policies. After achieving highest score in 2009-10, there is continuous fall in number of new policies issued till 2014-15. The year 2010-11 to 2014-15 saw successive negative growth rate. In 2015-16 the policies issued rises to 267.56 lakhs which showed a little but positive rise of 3.27% of growth after a big and sudden fall of -36.61% in 2014-15. It managed to issue a total of 264.56 lakh policies in 2016-17.

**Table 2: Number of Policies Issued in Pre and Post Liberalization Period**

Pre-Liberalization			Post Liberalization		
Years	Policies	Growth rate (in %)	Years	Policies	Growth rate (in %)
1984-85	27.02		2001-02	232.98	-
1985-86	33.03	22.23	2002-03	253.71	8.90
1986-87	38.85	17.64	2003-04	286.27	12.83
1987-88	47.09	21.20	2004-05	262.11	-8.44
1988-89	60.07	27.56	2005-06	354.62	35.29
1989-90	75.94	26.42	2006-07	461.52	30.14
1990-91	88.23	16.18	2007-08	508.74	10.23
1991-92	94.13	6.69	2008-09	509.23	0.10
1992-93	99.75	5.97	2009-10	532.25	4.52
1993-94	107.45	7.72	2010-11	481.52	-9.53
1994-95	108.95	1.40	2011-12	441.93	-8.22
1995-96	110.44	1.36	2012-13	441.87	-0.01
1996-97	122.90	11.28	2013-14	408.72	-7.50
1997-98	133.34	8.50	2014-15	259.08	-36.61
1998-99	148.66	11.49	2015-16	267.38	3.20
1999-00	169.99	14.35	2016-17	264.56	-1.05
CAGR	13.04			0.851	
MEAN	91.6145			372.906	
Standard Deviation	42.2045			106.833	
KURTOSIS	2.1185			-1.8263	
SKEWNESS	0.04188			0.0791	
Minimum	27.02			232.98	
Maximum	169.99			532.25	
CV	46.06			28.65	
J-B TEST	0.5227			1.8427	
P-VALUE	0.7699			0.398	
Paired t Test Value	<b>10.121 (sig at two tailed= 0.0000)</b>				

Source: Computed

The CAGR and mean value of pre-liberalization period as accounted were 13.04% and 91.6145 respectively. As compared to pre-liberalization, the post liberalization witnessed much higher mean value 372.9056. However, the CAGR declined to 0.851% only for post phase. The difference between minimum and maximum values of pre and post liberalization also shows that the post liberalization statistical values are far more than the pre-liberalization. The variability in number of new policies issued is indicated by standard deviation. The value of standard deviation for post liberalization period 106.833 is greater than pre-liberalization value 42.205. The JB test statistics confirms the normality of distribution as p-values 0.7699 and 0.398 of both distributions are greater than 0.05 level of significance. In addition to this, the value of skewness is near to zero which further confirms distribution is symmetrical. The coefficient of variation shows there is more consistency in post liberalization phase of life insurance sector than the pre-liberalization phase.

The Paired t test value is 10.121 at 15 degree of freedom at 5% significance level. The t critical value (two tailed) at 5% level of significance is found to be 2.1314 which is less than t tabulated value 10.121 i.e.  $t_{\text{tab}} > t_{\text{critical}}$ . Thus, there is significant difference recorded in new policies issued in pre and post liberalization. Hence, it is proved that the null hypothesis that there is no significant difference stands rejected.

#### **Growth of Life Insurance Penetration**

The insurance penetration and insurance density are the two developmental factors which show true picture of insurance concentration in an economy. The insurance penetration is the percentage of premium to GDP. The Indian life insurance industry having long history is still lacking behind in penetrating insurance among the individuals. The division into pre liberalization penetration and post liberalization penetration highlights the track record of effects of liberalization on life insurance industry. The data provides a picture of life insurance penetration of India since 1985. The insurance penetration before liberalization was very low. It was 0.6% as percent of GDP in 1985. It took almost 15 years to penetrate the country to reach 1.5% which is estimated to be far below the developed countries. Indian

life insurance sector in terms of penetration ranked at 52 in the world in 2000. The gradual emergence of sector has raised the penetration level throughout the period. Although, in the initial years of liberalization the level of penetration remained on an average at 1% while the reform process breaks the bar and insurance penetration reached to its highest 4.1% in the year 2009. The level of penetration in 2009 and 2010 accounted to be greater than the penetration level in many developed countries such as USA, Germany and other emerging nations. The world average as recorded by Swiss re was 4% for the same year. Subsequently, the market volatility and financial crisis led the economic markets of the world to downgrade the global growth rate. The insurance sector also hit hard. This leads to decline in the life insurance penetration at national level also. However, it has managed to rise in 2017, after a steep fall since 2011. Consequent to this; the sector has been referred as buoyant market which has actuated after the commencement of liberalization.

**Table 3: Insurance Penetration in Pre and Post Liberalization Period**

Pre-Liberalization		Post Liberalization	
Years	Penetration (in %)	Years	Penetration (in %)
1985	0.6	2002	2.2
1986	0.7	2003	2.4
1987	0.6	2004	2.6
1988	0.7	2005	2.9
1989	0.8	2006	3.6
1990	0.9	2007	4.0
1991	1.0	2008	3.9
1992	1.0	2009	4.1
1993	1.0	2010	3.7
1994	1.0	2011	3.3
1995	1.1	2012	2.9
1996	1.1	2013	2.8
1997	1.2	2014	2.6
1998	1.2	2015	2.6
1999	1.3	2016	2.8
2000	1.5	2017	2.8
CAGR	6.29		1.6207
MEAN	0.9812		3.075
Standard Deviation	0.2562		0.5858
KURTOSIS	2.3712		-1.1086
SKEWNESS	0.1412		0.5017
Minimum	0.6		2.2
Maximum	1.5		4.1
CV	26.111		19.05
J-B TEST	0.3167		1.421
P-VALUE	0.8535		0.4914
Paired t Test Value	<b>13.038 (sig at 2 tailed=0.0000)</b>		

Source: Computed

The evaluation of the table3 depicts that the mean value is greater in post liberalization period. The Paired t test application further confirms the statistically significant difference in between pre penetration rate and post penetration rates. *The test thus, rejects null hypothesis at 5 percent level of significance and at 15 degrees of freedom that there is no difference recorded in the data after liberalization.* Here, the t-tab value result is greater than the t-critical value.

### **Growth of Insurance Density**

The density is another developmental measurement of insurance in an economy. It is defined as per capita premium. The data has been categorized into pre- phase density and post-phase density indicating it in US dollar (USD) before and after liberalization. The Indian economy before the initiation of reform period had an underdeveloped insurance institution. All the policies and plans were originated by the government led LIC. The reforms in the insurance were initiated in this respect to support the economy's financial system and to level up the penetration among the rural households. During the period from 1985 to 2017, an overall observation propounds that there is consistent rise in the life insurance density of India year on year. However, the upsurge of life insurance industry after liberalization has taken momentum in other variables but looking at density level it is far below the world average. The cross countries visitation reflects

that the insurance density of the developed countries is far greater than the emerging nations of the world. Even the liberalization has not raised it to the expected grades. Indian life insurance sectors' density level was only 2 USD in 1985 which grew to become 7 USD on the eve of liberalization. India was ranked 78<sup>th</sup> in terms of life insurance density in 2000.

**Table 4: Insurance Density in Pre and Post Liberalization Period**

Pre- Liberalization		Post Liberalization	
Years	Density (in USD)	Years	Density (in USD)
1985	2	2002	11
1986	2	2003	13
1987	3	2004	16
1988	3	2005	21
1989	3	2006	30
1990	4	2007	42
1991	3	2008	40
1992	3	2009	46
1993	3	2010	52
1994	4	2011	48
1995	4	2012	42
1996	5	2013	41
1997	5	2014	41
1998	5	2015	43
1999	6	2016	47
2000	7	2017	55
CAGR	8.71		11.33
MEAN	3.875		36.75
Standard Deviation	1.4083		13.6359
KURTOSIS	2.6899		-0.644
SKEWNESS	0.6702		-0.8177
Minimum	2		11
Maximum	7		55
CV	36.34		37.11
J-B TEST	1.2618		1.9922
P-VALUE	0.5321		0.3693
Paired t Test Value	9.996 (sig at two tailed= 0.0000)		

Source: Computed

The life insurance density in India as compared to 2016 is 27.5 times greater than in 1985. But if compared with world average, the Indian density is 8.1 times smaller and 40 times smaller than US per capita premium. The descriptive analysis in the table4 confirms that there is improvement in life insurance density at national level. The before and after figures are compared and reflect that the post mean value is greater than pre liberalization density mean value. Moreover, it is also checked by applying Paired t test which reaffirms that the t-tab value at 5 percent significance level is 9.996 which is greater than the t-critical value of 2.1314 computed at 15 degrees of freedom. *Thus, the null hypothesis that there is no statistical significance notified after liberalization stands rejected.*

### Conclusion

Life Insurance sector is an integral part of financial system alike of, banking sector which critically helps in mitigating risk and building assurance among the individuals. The study has analysed the overall picture of life insurance industry before and after liberalization and evaluates its performance and efficiency therein. The structure of life insurance industry has shown marvellous growth after de-monopolization policy. The results are strongly evident that the life insurance growth is sensitive to changes in its developmental indicators in India. It is requisite to hike the cap of foreign investment in insurance sector further as foreign capital inflows will bring more liquidity to the insurance sector which in turn will make better the health status of the Indian economy. In addition to this, low financial literacy and access to financial services are major reasons behind uninsurable population of India. The insurance penetration and spending in India can be increased by strengthening the key network of distribution channels. The distributional channels are the intermediaries that bridge the gap between the customers and products-plans of a company. The various distributive channels are direct selling, individual agents, corporate agents, web aggregators, online and common service centres.



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