

## ANALYSIS OF GROWTH OF INSURANCE DENSITY AND INSURANCE PENETRATION IN INDIA AFTER INITIATION OF REFORMS IN INSURANCE SECTOR

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### ABSTRACT

As a part of on-going reforms measures the Government of India had initiated reforms in the insurance sector since 2000 when for the first time, private insurers were allowed to enter into insurance business and in the insurance sector FDI up to 26 per cent was allowed to the foreign companies. Afterwards, the Government has allowed FDI up to 49 per cent in insurance business in India under automatic approval route. Now, as per relaxed Government norms, the foreign investment up to 49 percent of the total paid-up equity of an Indian Insurance Company shall be allowed under automatic route subject to approval of the Insurance Regulatory and Development Authority of India ( IRDAI).

The present research paper has made an analysis of the growth of insurance business in India during the period 2000-01 to 2013-14 by taking two important parameters namely, Insurance Density and Insurance Penetration in respect of life insurance and non-life insurance business separately . Analysis has also been made in respect of Insurance Industry as a whole in our country. Further, by making an international comparison in respect of percentage share of life-insurance premium collection and percentage share of non-life insurance premium collection, another attempt has been made to find out which one of the two is dominating over the other in India and elsewhere in the world.

**Key Words :** FDI, Insurance Density, Insurance Penetration, IRDAI, Life Insurance, Non-life Insurance

### Introduction:

Insurance business in our country has passed over three phases namely, **non-regulation** in the British period and in the period just after independence, **regulation** during the post-independence period and **deregulation** during the current period. During the current phase of deregulation, a number of insurers have come forward with insurance business and in consequence, a noticeable growth accompanied with hard core competition among the insurers is being observed in the insurance sector. In the present paper, the present researcher has made an attempt to analyze the growth of the life and non-life insurance business in our country during the current deregulation period, by taking two parameters namely insurance density and insurance penetration in India

during a particular study period in respect of Life Insurance and Non-Life Insurance separately and also in respect of Insurance Industry as a whole.

### **Objectives of the Study:**

The study has been made with the following major objectives :

- (1) To make an attempt to compute and analyse the growth of life and non-life insurance business in our country during the study period ;
- (2) To make an international comparison of the scenario of life insurance premium collection and non-life insurance premium collection ; and
- (3) To make some concluding remarks on the basis of the findings of the study.

### **Study Period:**

The study period taken in this research work is a period of 14 years i.e. 2000-01 to 2013-14.

**Sources of Data:** All the data used in the present study are secondary data. The data have been collected from the Annual Reports of IRDAI for different years given in their website.

### **Research Methodology:**

The present research study is mainly an analytical work based on the collected data. In the present study, simple statistical and arithmetical tools like Minimum Value, Maximum Value, Mean, Standard Deviation and Co-efficient of Variations have been used. The necessary computations in respect of Mean and Standard Deviation have been done with the help of Excel in computer. The Co-efficient of Variations have been computed manually by using specific formula i.e.  $S.D./Mean \times 100$ . The Growth Rates of different parameters have been shown in terms of percentage and these have been computed manually.

With the help of aforesaid statistical tools the growth rates of Insurance Density and Insurance Penetration during the study period have been analysed. Further, the world-wide as well as country/region-wise situations in respect of percentage share of life insurance premium collection and non-life insurance premium collection in the total insurance premium collection have also been analysed. At the end, some concluding remarks have been made.

### **Plan of the Work:**

The research work has been divided into some sections. They are : Discussion on Re-Opening of Insurance Business to the Private Agencies, Discussion on Number of Total Insurance Companies and Sector-wise Break Up, and Evaluation of Growth of Insurance Density and Insurance Penetration in India . Then, under the heading **Results and Discussion**, analyses have been made on Insurance Density in respect of Life Insurance, Insurance Penetration in respect of Life Insurance, Insurance Density in respect of Non-Life Insurance, Insurance Penetration in respect of Non-Life Insurance, Insurance Density in respect of Insurance Industry as a whole and Insurance Penetration in respect of Insurance Industry as a whole. And then, International Comparison has been made in respect of Life and Non-Life Insurance Premium Collection with necessary analyses.

### **Discussion on Re-Opening of Insurance Business to the Private Agencies :**

1991 was the introduction year when Government of India took up liberalisation policies in the financial sector. As a part of financial sector reforms, the Government of India was also desirous of re-opening the insurance sector to the private agencies. In 1993, the Government set up the

Malhotra Committee under the chairmanship of Mr. R.N. Malhotra, the Ex- Governor of RBI for the propose of making some recommendations on reforms in the insurance sector. The objective of setting up of this committee was to complement the reforms already initiated by the Government in the financial sector. The committee submitted its report in 1994 wherein, including some other recommendations, it recommended that the private sector be permitted to enter the insurance business. The committee further recommended that also the foreign companies be allowed to enter the insurance business in India by floating Indian companies, preferably by making a joint venture with Indian partners.

In the year 1999, as per recommendations of the Malhotra Committee, **Insurance Regulatory and Development Act, 1999** was passed and the **Insurance Regulatory and Development Authority (IRDA)** was constituted as an autonomous body to regulate and develop the insurance industry. The IRDA was incorporated as a statutory body in April, 2000. The key objectives of the IRDA include promotion of competition among the insurance companies so as to enhance customer satisfaction through increased consumer choice and lower premiums, while ensuring the financial security of the insurance market. The IRDA opened up the insurance market in August 2000 with the invitation of applications from the companies desiring to carry out insurance business for registration with the IRDA. Initially, the foreign companies were allowed equity ownership up to 26 per cent.

In December, 2000, the subsidiaries of the General Insurance Corporation of India were restructured as independent companies and at the same time GIC was converted into a national re-insurer. Starting from the year 2000, the IRDA has framed a number of regulations ranging from registration of companies for carrying on insurance business to protection of policyholders' interests.

Seeking to attract more foreign investment, the government has recently relaxed FDI norms for the insurance sector by permitting overseas companies to buy 49 per cent stake in domestic insurers without prior approval. Earlier, only up to 26 per cent FDI was permitted through the automatic approval route. For FDI up to 49 per cent, the approval of the Foreign Investment Promotion Board was required. As per latest relaxed norms, the foreign investment up to 49 percent of the total paid-up equity of the Indian Insurance Company shall be allowed on the automatic route subject to approval or verification by the Insurance Regulatory and Development Authority of India.

#### **Number of Total Insurance Companies and Sector-wise Break Up :**

As per IRDA Annual Report for the year 2013-14, at the end of September 2013, 52 insurance companies are operating in India , and of these 24 companies are in life insurance business, 27 companies are in non-life insurance business and one company i.e. GIC is the sole national re-insurer. Of these 52 insurance companies, 8 (eight) companies are in the public sector and 44 (forty four) companies are in the private sector. Of these eight public sector companies, two namely ECGC and Agricultural Insurance Corporation of India (AICI) are specialised insurers, one i.e. LIC is in life insurance, four are in non-life insurance and one namely GIC is in re-insurance business. Again, of the total 24 life insurance companies, only one i.e. Life Insurance Corporation of India is in the public sector and remaining 23 are in the private sector.

#### **Evaluation of Growth of Insurance Density and Insurance Penetration in India :**

The measure of Insurance Penetration and Insurance Density reflects the level of development of insurance sector in a country. Insurance Penetration is measured as a percentage of

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total insurance premium collected to GDP of the country. Insurance Density is calculated as a ratio of total insurance premium collected to total population of the country. Hence, Insurance Density means per capital insurance premium collected. The following table shows the data in respect of Insurance Density and Insurance Penetration incidental to life insurance and non-life insurance separately and incidental to insurance industry (i.e. incidental to life insurance plus non-life insurance combined ) for the period from 2000-01 to 2013-14 , along with computed values of Mean, Minimum Value, Maximum Value, Standard Deviation, Co-efficient of Variation and Overall growth .

**Table No. 1**  
**Insurance Density and Insurance Penetration in India**

Year ended 31 <sup>st</sup> March	In respect of <b>Life Insurance</b>		In respect of <b>Non-Life Insurance</b>		In respect of <b>Insurance Industry as a whole</b>	
	Insurance Density (US \$)	Insurance Penetration (Percentage )	Insurance Density (US \$ )	Insurance Penetration (Percentage )	Insurance Density (US \$ )	Insurance Penetration (Percentage )
2001	9.1	2.15	2.4	0.56	11.5	2.71
2002	11.7	2.59	3.0	0.67	14.7	3.26
2003	12.9	2.26	3.5	0.62	16.4	2.88
2004	15.7	2.53	4.0	0.64	19.7	3.17
2005	18.3	2.53	4.4	0.61	22.7	3.14
2006	33.2	4.10	5.2	0.60	38.4	4.80
2007	40.4	4.00	6.2	0.60	46.6	4.70
2008	41.2	4.00	6.2	0.60	47.4	4.60
2009	47.7	4.60	6.7	0.60	54.4	5.20
2010	55.7	4.40	8.7	0.71	64.4	5.10
2011	49.0	3.40	10.0	0.70	59.0	4.10
2012	42.7	3.17	10.5	0.78	53.2	3.96
2013	41.0	3.10	11.0	0.80	52.0	3.90
2014	44.0	2.60	11.0	0.70	55.0	3.30
<b>Minimum</b>	<b>9.10</b>	<b>2.15</b>	<b>2.40</b>	<b>0.56</b>	<b>11.50</b>	<b>2.71</b>
<b>Maximum</b>	<b>55.70</b>	<b>4.60</b>	<b>11.00</b>	<b>0.80</b>	<b>64.40</b>	<b>5.20</b>
<b>Mean</b>	<b>33.04</b>	<b>3.24</b>	<b>6.63</b>	<b>0.65</b>	<b>39.67</b>	<b>3.92</b>
<b>S.D.</b>	<b>16.01</b>	<b>0.84</b>	<b>3.08</b>	<b>0.07</b>	<b>18.66</b>	<b>0.85</b>
<b>C.V. ( per cent)</b>	<b>48.45</b>	<b>25.92</b>	<b>46.45</b>	<b>10.76</b>	<b>47.03</b>	<b>21.68</b>
<b>Overall Growth ( per cent)</b>	<b>383.5</b>	<b>20.93</b>	<b>358.33</b>	<b>25.00</b>	<b>378.26</b>	<b>21.77</b>

Source : IRDAI Annual Report for the year 2014-15 , p. 7

## Results and Discussion:

### Analysis of Insurance Density in respect of Life Insurance :

Insurance Density means per capita insurance premium collected. It is observed that in respect of life insurance, the mean value of Insurance Density during the period from 2000-01 to 2013-14 was 33.04 US \$ registering an overall growth of 383.51 per cent (by comparing the value of the initial year and the same of the last year). The average growth rate per year during fourteen year study period works out at 27.39 per cent. Insurance Density was lowest at 9.1 US \$ in 2000-01 and it was highest at 55.70 US \$ in 2009-10. It is interestingly observed that since the year 2000-01, Life Insurance Density increased continuously up to 2009-10 and thereafter slight fall was observed consecutively in a row of three years i.e. in 2010-11 to 2012-13. Then it again increased in the next

year. The Standard Deviation value of Life Insurance Density works out at 16.01 US \$ which is quite high and it indicates that the deviations from the mean value of Life Insurance Density in different years were very wide. It is seen that throughout the study period (except in three years before the last year ) the Insurance Density was in an increasing trend . The C.V. value works out at 48.45 per cent and it is also quite high. This means that the S.D. is 48.45 per cent of the mean value.

#### **Analysis of Insurance Penetration in respect of Life Insurance :**

It is seen that the mean value of Insurance Penetration in respect of life insurance was 3.24 per cent of GDP and such ratio was highest at 4.60 per cent of GDP in 2008-09 and it was lowest at 2.15 per cent in 2000-01 i.e. in the initial year of the study period, which is incidentally also the first year after introduction of the deregulation in the insurance sector. The computed S.D. value is only 0.84 which appears to be quite low. It is observed that though throughout the study period, Insurance Penetration as a percentage of GDP was almost in an increasing trend resulting in an overall growth of 20.93 per cent during the whole study period ( by comparing the values of Insurance Penetration for the first year and the same for the last year ), the rate of such increase appears to be very low. The low value of S.D. also supports this fact. The Co-efficient of variation value works out at 25.92 per cent. This means that the S.D. is 25.92 per cent of the mean value of Insurance Penetration in respect of Life Insurance.

#### **Analysis of Insurance Density in respect of Non-Life Insurance:**

It is observed that during the period of our study, Insurance Density i.e. per capita Insurance Premium collected in respect of non-life insurance (i.e. insurance on other than life ) was on an average 6.63 US \$ and such per capita insurance premium collection was lowest at 2.40 US \$ in the initial year 2000-01 and it reached the peak of 11 US \$ in 2012-13 and remained unchanged at the end of the study period i.e. in the year 2013-14. The overall growth of Insurance Density during the whole study period works out at 358.33 per cent. It is observed that per capita premium collection increased continuously throughout the whole study period except the year 2007-08 when it remained static at previous year's level at 6.2 US \$ per head.. The S.D. value works out at 3.08 US \$ and it is quite low. It indicates that the deviation from mean value of per capita insurance premium collection in respect of non-life insurance was not very wide. The C.V. value works out at 46.45 per cent which means that the S.D. of Insurance Density was 46.45 per cent of the mean value.

#### **Analysis of Insurance Penetration in respect of Non-Life Insurance:**

It is seen that during the period of the study Insurance Penetration i.e. total insurance premium collected towards non-life insurance as a percentage of GDP was on an average 0.65 per cent with its minimum value at 0.56 per cent in the initial year of the study period i.e. in 2000-01 and maximum value at 0.80 per cent in 2012-13 and 2013-14, registering an overall growth of 25 per cent during the whole study period. The S.D. value of Insurance Penetration in respect of non-life insurance works out at only 0.07 per cent and it is seen that the S.D. value is quite low. It is interestingly observed that the values of Insurance Penetration moved in a zigzag way. In the year 2001-02, it increased over previous year's level and in the following year i.e. in 2002-03 it fell and again in the following year it increased. Then it again decreased in 2004-05 and thereafter it remained static consecutively in a row of four years up to 2008-09. In the next year i.e. in 2009-10 it increased substantially and reached the peak at 0.80 per cent in the year 2012-13, after falling slightly in the year 2010-11. The C.V. value works out at 10.76 per cent which appears to be quite low.

### Analysis of Insurance Density in respect of Insurance Industry as a whole:

While making an analysis of the picture of Insurance Density in respect of Insurance Industry as a whole (i.e. by taking into account both life insurance and insurance other than life ), it can be said that during the study period, mean value of Insurance Density in respect of total insurance ( i.e. life insurance plus non-life insurance ) was 39.67 US \$ and the overall growth of such insurance density during the whole study period was 378.26 per cent . The Insurance Density was found to be lowest at 11.50 US \$ in 2000-01 and highest Insurance Density was observed at 64.40 US \$ in 2009-10. It is remarkably observed that Insurance Density of the total Insurance Industry rose continuously and consistently up to 2009-10 when it reached the peak and thereafter the Insurance Density fell consecutively in a row of three years i.e. in 2010-11 to 2012-13. The S.D. value and the C.V. value in respect of Insurance Density of Insurance Industry work out at 18.66 per cent and 47.03 per cent respectively.

### Analysis of Insurance Penetration in respect of Insurance Industry as a whole:

It is seen that for the Insurance Industry, the mean value of Insurance Penetration was 3.92 per cent with its lowest value at 2.71 per cent in 2000-01 and highest value at 5.20 per cent in 2008-09. The overall growth of Insurance Penetration for the Insurance Industry during the whole study period was 21.77 per cent with S.D. and C.V. value at 0.85 per cent and 21.68 per cent respectively. The S.D. value appears to be quite low which indicates that the data in respect of Insurance Penetration in different years did not deviate too much from the mean value. The C.V value of 21.68 per cent indicates that the S.D. value was 21.68 per cent of the mean value.

### International Comparison of Life and Non-Life Insurance Premium Collected

The following table shows the region/country-wise picture of insurance premium collection (separately for life insurance and non-life insurance and also for life and non-life insurance combined ) as available in the Annual Report of IDAI for the year 2014-15 .

**Table No.2 Region-wise Life and Non-Life Insurance Premium in the World**

(Premium in US D Billion)

Region/Country	Life Insurance Premium	Non-life Insurance Premium	Total Premium
Advanced Economies	2232.52 (56.67)	1706.79 (43.33)	<b>3939.31</b> <b>(100)</b>
Emerging Markets	422.03 (50.30)	416.91 (49.70)	<b>838.94</b> <b>(100)</b>
Asia	892.32 (67.72)	425.25 (32.28)	<b>1317.57</b> <b>(100)</b>
India	55.30 (79.12)	14.59 (20.88)	<b>69.89</b> <b>(100)</b>
<b>World</b>	<b>2654.55</b> <b>(55.55)</b>	<b>2123.70</b> <b>(44.45)</b>	<b>4778.25</b> <b>(100)</b>

**Source :** IRDAI Annual Report 2014-15, p.5

**Note :** Figures in brackets indicate market share of the segment in percent.

### **ANALYSIS :**

The international scenario of Insurance Premium Collection reveals that globally the share of life insurance premium was 55.55 per cent of the total insurance premium collection and the share of non-life insurance premium was 44.45 per cent of total insurance premium collection . It is seen that in advanced economies, out of total insurance premium collection, the share of life insurance premium collection was 56.67 per cent and the contribution of non-life insurance premium was 43.33 per cent. In emerging economies, the contribution of life insurance premium collection was 50.3 per cent whereas the contribution of non- life insurance premium was 49.7 per cent. In Asian regions, the share of life insurance premium was 67.72 per cent as against the share of non-life insurance premium at 32.28 per cent. In India, out of total insurance premium collection, the amount of life insurance premium collection works out at 79.12 per cent and the balance 20.88 per cent relates to non-life insurance. It is interestingly observed that out of total insurance premium collected , the percentage share of life insurance premium collection in India was not only highest but also very high ( i.e. 79.12 per cent ) both in comparison to world-wide average figure of 55.55 per cent and the average figure prevailing separately in advanced economies, emerging economies and the Asian regions. In India, the share of non-life insurance premium (in comparison to total insurance premium collected) was only 20.88 per cent as against the world-wide figure at 44.45 percent. It is observed that the share of non-life insurance premium in India was not only lower than the world-wide average figure but also lower than the same at 43.33 per cent in advanced economies, 49.7 per cent in emerging economies and 32.28 per cent in Asian regions .

### **Limitations of the Study:**

The present study has the following limitations.

(a)The study is based on the data for the period from 2000-01 to 2013-14. Had the data for both regulation and deregulation period been taken into consideration, the findings of the study could be more meaningful.

(b) The study has taken only a few parameters like insurance penetration, insurance density and total insurance premium collected. Some other parameters, if incorporated, could have enriched the study.

(c ) The rate of insurance premium is not the same for different types of insurance. The rate of life insurance premium payable by a policy holder depends on the sum assured and age of the concerned individual and it also varies from scheme to scheme offered by the insurer company. The premium payable in respect of non-life insurance policy generally depends on the value of the insured property. This disparity in the rate structure of life and non-life insurance premium has not at all been considered in the present study. Had this factor been taken into consideration, the comparative analysis of the contribution of life insurance premium and non-life insurance premium could have revealed different results.

### **CONCLUSION:**

Insurance sector in our country has a significant contribution for economic development of our country as it provides long-term funds for infrastructure development and at the same time it helps strengthening the risk taking ability of the country. During the deregulation period , due to

emergence of a large number of private insurers , the insurance penetration and insurance density have increased significantly both in respect of life-insurance and non-life insurance business.

It can be said that during the period of the study, life insurance business has grown tremendously than its counterpart. People of India have preferred saving of their lives to saving of their property . The saving of their valuable properties has appeared to be their second preference. Worldwide scenario of life and non-life insurance premium collection also supports the truth equally.

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