

# An Analysis of the Growth of Indian Insurance Industry with Reference to Top Ten Economies of the World

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## Abstract

With the insurance sector in full bloom, today, it would not be wrong to say that in the present market scenario, there is an insurance available for just about anything and everything. Insurance is no doubt an area of immense importance with regard to the financial and monetary sectors of every individual. The whole idea behind insurance is, it is a security tool which is designed to secure the financial status of an individual and also of his/her dependents, in case he/she undergoes an unforeseen loss related to health, property or liability. Insurance sector in India has been growing continuously after its opening up for private players in 1999. Therefore an attempt has been made in this paper to study the growth of Indian insurance sector with reference to the growth of insurance sector in top ten economies of the world. To study the growth and opportunities in the insurance sector, premium income, growth in premium income, insurance density and insurance penetration have been measured. The measure of insurance penetration and density reflects the level of development of insurance sector in a country. While insurance penetration is measured as the percentage of insurance premium to GDP, insurance density is calculated as the ratio of premium to population.

**Keywords:** *insurance; growth; economies; insurance density; insurance penetration; premium; risk*

## 1. Introduction

It is a commonly acknowledged phenomenon that there are countless risks in every sphere of life, for property there are fire risk; for shipment of goods, there are perils of sea; for human life, there are risks of death or disability. The chances of occurrences of the events causing losses are quite uncertain because they may or may not take place. The risk is the result of effect of any unforeseen event or its happening. The future is unpredictable and full of uncertainties. Risks are inherent in all forms of economical, political, social, environmental and business activities. Planning alone cannot solve or protect against uncertainties. Therefore, Insurance has emerged and developed as a means to protect and provide coverage against risks and uncertainties. Insurance is a contract which provides financial risk coverage to the insured against any adverse event for a payment called premium.

The insurance industry in India has seen an array of changes in the past two decades. The economic scenario which emerged after globalization, privatization and liberalization has thrown new challenges before insurance sector. Now it has to be more competitive in order to meet the needs and demands of its customers. Indian insurance has been growing continuously after its opening up for private sector in 1999 but it still in its infancy stage if comparison is made other top economy of the world. There an attempt has been made in this paper to study the growth of Indian insurance industry in comparison to other top economies of the world.

## 2. Review of Literature

**Verma (2000)**, in her thesis, evaluated the performance of the GIC and its subsidiary companies over the years, throwing light on the profitable effects of the various insurance sector reforms on the future development of General

Insurance in the country. The study found that the GIC along with its subsidiaries has emerged not only as a strong insurance institution but also as influential institutional investors in the financial market of India due to large amount of funds at its disposal. The study suggested that GIC should bring reform in pricing the General Insurance contracts and use information technology for better management, customer service, efficiency and competitiveness.

**Rudolf (2001)**, in his paper examined the key factors and latest trends determining profitability in the major non-life insurance markets. The study focused on the non-life insurance markets of the group of seven countries (G7) mainly for the period 1996 to 2000. The study found that underwriting results and investment yields are negatively correlated. The research suggested that due to uncertain prospects for investment results, the insurers must focus on underwriting results to achieve greater profitability.

**Lai and Limpaphayom (2003)**, in their study examined the relation between organizational structure and firm performance in the Japanese non-life insurance industry. The results indicated that the stock companies that belong to one of the six horizontal Keiretsu groups have lower expense and lower levels of free cash flow than independent stock and mutual insurance companies. Keiretsu insurers also have higher profitability and higher loss ratios than independent insurers. There was also evidence that mutual insurers have higher levels of free cash flows, higher investment incomes and lower financial leverage than their stock counterparts. Overall, empirical evidence suggested that each structure has its own comparative advantage.

**Banerjee (2004)**, in his article, "Insurance Regulation in India and Future Directions," concluded that the insurance industry will face greater competition from other financial service providers along all aspects of their value chain. Insurers for instance, with their significant and growing asset base, shall have to develop asset management capabilities and expertise on par with professional fund managers, otherwise they will face pressure to farm out their funds for professional management.

**Festus (2011)**, in his study, "Achieving Competitive Advantage in Insurance Industry: The Impact of Marketing Innovation and Creativity", concluded that creativity and innovation in providing new and innovative services is an important factor in order to satisfy the clients need and that creativity and innovation in pricing and promotion and innovation and creativity in distribution, technological innovation are crucial in attracting new clients.

### 3. Objectives of the Study

- To study the growth of Indian insurance industry after its opening up for private players.
- To study the growth of Indian insurance industry with reference to top economies of the world.

### 4. Research Methodology

To study the growth and opportunities in the insurance sector of any country, premium income, growth in premium income, insurance density and insurance penetration should be measured. To study the Indian insurance industry in world perspective, we have compared the premium income, insurance density and insurance penetration of select countries of the world. We have compared the insurance industries of the top ten economies of the world based on the size of their Gross Domestic Product (GDP). The measure of insurance penetration and density reflects the level of development of insurance sector in a country. While insurance penetration is measured as the percentage of insurance premium to GDP, insurance density is calculated as the ratio of premium to population (per capita premium).

#### 4.1 Top Ten Economies of the World

Top ten economies of the world based on the size of their GDP have been shown in Table 1.

**Table 1.** Top Ten Economies of the World

COUNTRY	GDP (in trillions of US Dollars)
United States	15.5
China	8.3
Japan	6
Germany	3.4
France	2.6
United Kingdom	2.4
Brazil	2.4
Italy	2
Russia	2
India	1.9

**Source:** IMF World Economic Outlook 2012

Table 1.1 reveals that out of ten economies of the world United States has the highest Gross Domestic Product, that is, \$15.5 trillion, followed by China (\$8.3 trillion) and Japan (\$6 trillion). India is at tenth position with \$1.9 trillion GDP.

#### 4.2 Life Insurance Volume

Country wise life insurance volume has been shown in Table 2.

**Table 2.** Life Insurance Volume in USD (in millions of USD)

COUNTRY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
U.S.	443413	480452	480919	494818	517074	533649	578357	578211	492345	506228	537570	567756	532858
CHINA	15556	25054	32442	35407	39592	45092	58677	95831	109175	142999	134539	141208	152121
JAPAN	356731	354553	381335	386839	375958	362766	330651	367112	399100	440950	524668	524372	422733
GERMANY	55631	60860	76738	84535	90225	94911	102419	111278	111775	114868	113869	106411	114349
FRANCE	75146	80411	105436	128813	154058	177902	186993	181146	194077	192428	174753	149346	160156
U.K.	152717	159656	154842	189591	199612	311691	349740	342759	217681	213831	210067	205918	222893
BRAZIL	4511	4749	6306	8199	10556	13699	18285	22419	24781	33246	41046	44784	49417
ITLAY	41481	52444	71694	82083	91740	89576	88215	82623	115290	122063	105089	93273	117978
RUSSIA	4783	3313	4868	3544	904	571	873	765	636	901	1185	1732	2666
INDIA	10504	12274	13590	16919	20175	37220	47132	48860	57114	67810	60442	53300	52174
WORLD	1439177	1536122	1672514	1848688	1973703	2209317	2393089	2490421	2331566	2520072	2626944	2620864	2608091

**SOURCE:** SWISS RE, SIGMA NO.6/2002 TO NO.3/2014

It is evident from the table that USA top in the life insurance volume followed by Japan and Germany. Russia is at the lowest level. There is an increasing trend in the life insurance volume in all the countries except few years. In India, It has increased almost six times from 10504 million dollars in 2001 to 67810 million dollars in 2011. It has increased continuously after opening up of the insurance sector in 2000 up to the year 2011, there after it has shown a decreasing trend for next three years. The figures of life insurance volume are impressive if a comparison is made with other fast developing countries like Brazil and Russia but India lagging behind the figures of China. If the comparison is made with the developed nations like United States, United Kingdom, Japan, Germany, France, Italy, India is far behind from these countries. The worldwide life insurance volume has also been increasing continuously. In the Indian context, no doubt, life insurance volume has increased during the period under study but it is still very low as compared to the developed nations.

#### 4.3 Non-Life Insurance Volume

Country wise no-life insurance volume has been shown in Table 3.

**Table 3.** Non Life Insurance Volume in USD (in millions of USD)

COUNTRY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
U.S.	460608	519858	574579	603018	625838	636452	651311	662432	647401	659915	667107	703128	726397
CHINA	9928	11834	14468	16765	20539	25713	33810	44987	53872	71628	87319	104302	125844
JAPAN	89114	91028	97530	105587	100523	97495	94182	106085	106856	116489	130741	129740	108773
GERMANY	68051	74911	94073	106261	107026	109633	120407	131807	126591	124949	131292	125497	132813
FRANCE	38449	44649	58244	65811	68162	73262	81907	91861	88993	87654	98359	93112	94598
U.K.	65664	77026	91891	105241	105126	106676	113946	107393	91560	96191	109486	105500	106750
BRAZIL	8953	7852	8259	9843	13399	16691	20501	25074	23979	30847	27240	37483	39513
ITLAY	27506	31616	40066	46728	47453	49103	54112	58066	54070	52285	55426	50945	50576
RUSSIA	4687	6266	9220	12809	16618	20932	28973	38013	38940	40742	42071	24296	25755
INDIA	2459	3197	3712	4330	4848	5812	7243	7329	7970	10562	12187	13142	13401
WORLD	969074	1090775	1268157	1395218	1452011	1514094	1667780	1779316	1738529	1818893	1968179	1991650	2032850

*Source: SWISS RE, SIGMA NO.6/2002 TO NO.3/2014*

It is evident from the table that non-life insurance volume has increased continuously in all the countries under study during study period. Again USA is at the top in non-life insurance volume throughout the study period. India is at the lowest level in non-life insurance volume. In India non-life insurance volume has also increased continuously. It has increased from 2459 million dollars in 2001 to 13401 million dollars in 2013 which looks impressive, but if the comparison is made with other top economies of the world under study, India has the lowest non-life insurance volume. Non-life insurance volume has also increased worldwide from 969074 million dollars to 2082850 million dollars in 2013.

#### 4.4 Life Insurance Density

Country wise life insurance density has been depicted in Table 4.

**Table 4.** Life Insurance Density (USD)

COUNTRY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
U.S.	1602	1662.6	1657.5	1692.5	1753.2	1789.5	1922	1900.6	1602.6	1631.8	1716	1808	1684
CHINA	12.2	19.5	25.1	27.3	30.5	34.1	44.2	71.7	81.1	105.5	99	103	110
JAPAN	2806.4	2783.9	3002.9	3044	2956.3	2829.3	2883.9	2869.5	3138.7	3472.8	4138	4143	3346
GERMANY	674.3	736.7	930.4	1021.3	1042.1	1136.1	1234.1	1346.5	1359.7	1402.2	1389	1299	1392
FRANCE	1268.2	1349.5	1767.9	2150.2	2474.6	2922.5	2928.3	2791.9	2979.8	2937.5	2638	2239	2391
U.K.	2567.9	2679.4	2617.1	3190.4	3287.1	5139.6	5730.5	5582.1	3527.6	3436.3	3347	3256	3474
BRAZIL	10.8	27.2	35.8	45.9	56.8	72.5	95.3	115.4	127.9	169.9	208	226	246
ITLAY	720.8	904.9	1238.3	1417.2	1449.8	1492.8	1439.4	1342.4	1878.3	1978.7	1696	1473	1895
RUSSIA	33.2	23.1	33.9	24.8	6.3	4	6.1	5.4	4.5	6.4	8	12.1	19
INDIA	9.1	11.7	12.7	15.7	18.7	33.2	40.4	41.2	47.7	55.7	49	42.7	41
WORLD	235	247.3	267.1	291.5	299.5	330.6	358.1	369.7	341.2	364.3	378	372.6	366

*Source: SWISS RE, SIGMA NO.6/2002 TO NO.3/2014*

Table explains the life insurance density in India as well as at the global level. Life insurance density is calculated as a ratio (in percentage terms) of premium to total population. It is clear from the table that Japan is at the top in Life insurance density followed by UK and France. It is also evident from the table that life insurance density in India has continuously increased from the year 2001 to 2011; thereafter it decreased during next three years. It has increased from \$9.1 in 2001 to its highest level \$55.7 in 2010. World -wide the life insurance density has also shown an increasing trend and it increased from \$235 to \$378 in 2011 thereafter it decreased during next two year. As is evident from the table, despite an impressive growth in life insurance density in the post reform period in India, it is still very small as compare to other top economies of the world under study. India has the lowest life insurance density except Russia as compare to other countries of the world under study.

#### 4.5 Non-Life Insurance Density

Country wise non-life insurance density has been depicted in Table 5.

**Table 5.** Non-Life Insurance Density (USD)

COUNTRY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
U.S.	1664.1	1799	1980.2	2062.6	2122	2134.2	2164.4	2177.4	2107.3	2127.2	2130	2239	2296
CHINA	7.8	9.2	11.2	12.9	15.8	19.4	25.5	33.7	40	52.9	64	76	91
JAPAN	701.1	714.7	768	830.8	790.4	760.4	736	829.2	840.4	917.4	1031	1025	861
GERMANY	809.9	891.1	1120.8	1265.3	1268.4	1300.7	1427.9	1572.7	1518.7	1501.6	1578	1505	1585
FRANCE	630.6	714.5	930.5	1057.7	1093.9	1152.9	1219.3	1339.2	1289.4	1249	1403	1304	1345
U.K.	825.9	1199.7	1441.4	1318	1311.9	1327.1	1383.2	1275.7	1051.2	1060.2	1188	1094	1087
BRAZIL	53.2	45	46.8	55.2	72.1	88.4	106.9	129.1	123.8	157.7	189	189	197
ITLAY	465.5	530.5	674.8	800.7	814.1	809.5	882.7	921.3	850.8	787.3	834	748	750
RUSSIA	32.6	43.5	64.3	89.6	116.5	146	203.3	268.1	276.4	290.4	295	170	180
INDIA	2.4	3	3.5	4	4.4	5.2	6.2	6.2	6.7	8.7	10	11	11
WORLD	158.2	175.6	202.5	220	219	224.2	249.6	264.2	253.9	263	283	283	285

*Source: SWISS RE, SIGMA NO.6/2002 TO NO.3/2014*

The table exhibits the non-life insurance density in India as well as at the global level. The non-life insurance density is measured as a ratio of premium to total population. It is evident from the table that USA is at the top in non-life density followed by Germany. India is at the bottom in non-life insurance density. It is clear from the table that non-life insurance density in India has increased about five times during the period under study. It has increased from \$2.4 in 2001 to \$11 in 2013. Even the developing countries like China, Brazil and Russia registered an impressive growth in the non-life insurance density. World- wide, the non-life insurance density has also shown an increasing trend, and it has increased from \$158.2 to \$285. It is evident from the table that non-life insurance density in India is lowest as compare to the other countries of the world under study. It seems that even the reform process has failed to provide the desired results despite the fact that the Indian insurance sector is still unexplored and untapped.

#### 4.6 Life Insurance Penetration

Country wise life insurance penetration has been depicted in Table 6.

**Table 6.** Life Insurance Penetration (premium in percentage of GDP)

COUNTRY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
U.S.	4.4	4.6	4.38	4.22	4.14	4	4.2	4.1	3.5	3.5	3.6	3.65	3.2
CHINA	1.34	2.03	2.3	2.21	1.78	1.7	1.8	2.2	2.3	2.5	1.8	1.70	1.6
JAPAN	8.85	8.64	8.61	8.26	8.32	8.3	7.5	7.6	7.8	8	8.8	9.17	8.8
GERMANY	3	3.06	3.17	3.11	3.06	3.1	3.1	3	3.3	3.5	3.2	3.12	3.1
FRANCE	5.75	5.61	5.99	6.38	7.08	7.9	7.3	6.2	7.2	7.4	6.2	5.64	5.7
U.K.	10.73	10.19	8.62	8.92	8.9	13.1	12.6	12.8	10	9.5	8.7	8.44	8.8
BRAZIL	0.36	1.05	1.28	1.36	1.33	1.3	1.4	1.4	1.6	1.6	1.7	1.99	2.2
ITLAY	3.81	4.39	4.82	4.86	4.86	4.7	2.6	3.5	5.3	5.8	4.7	4.46	5.5
RUSSIA	1.55	0.96	1.12	0.61	0.12	0.1	0.1	0	0	0	0.1	0.09	0.1
INDIA	2.15	2.59	2.26	2.53	2.53	4.1	4	4	4.6	4.4	3.4	3.17	3.1
WORLD	4.68	4.76	4.59	4.55	4.34	4.5	4.4	4.1	4	4	3.8	3.69	3.5

*Source: SWISS RE, SIGMA NO.6/2002 TO NO.3/2014*

Table explains the life insurance penetration in the global perspective. Life insurance penetration is measured as a ratio (in percentage terms) of the insurance premium to the Gross Domestic Product (GDP). It is clear from the table the life insurance penetration in India has increased from 2.15% in 2001 to 4.6% in 2009, thereafter it decreased during next four ant reached to 3.1% in 2013. The worldwide penetration of life insurance is almost stagnant. U.K. and Japan has topped in the life insurance penetration. The figures of India look better if the comparison is made with other developing countries like China, Brazil and Russia. The figures of Germany and Italy look slightly better

than the figures of India. However, India is far behind the developed nations like USA, U.K, Japan and France as far as the question of life insurance penetration is concerned.

#### 4.7 Non-Life Insurance Penetration

Country wise non-life insurance penetration has been depicted in Table 7.

**Table 7.** Non-Life Insurance Penetration (Premium in Percentage of GDP)

COUNTRY	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
U.S.	4.57	4.98	5.23	5.14	5.01	4.8	4.7	4.6	4.5	4.5	4.5	4.52	4.3
CHINA	0.86	0.96	1.03	1.05	0.92	1	1.1	1	1.1	1.3	1.2	1.26	1.4
JAPAN	2.21	2.22	2.2	2.25	2.22	2.2	2.1	2.2	2.1	2.1	2.2	2.27	2.3
GERMANY	3.6	3.7	3.82	3.86	3.73	3.6	3.6	3.5	3.7	3.7	3.6	3.62	3.6
FRANCE	2.85	2.97	3.15	3.14	3.13	3.1	3	3	3.1	3.1	3.3	3.28	3.2
U.K.	3.45	4.56	4.75	3.68	3.55	3.4	3	2.9	3	2.9	3.1	2.84	2.8
BRAZIL	1.78	1.74	1.68	1.63	1.68	1.6	1.6	1.6	1.5	1.5	1.5	1.66	1.8
ITLAY	2.46	2.58	2.63	2.74	2.73	2.5	3.2	2.4	2.4	2.3	2.3	2.27	2.2
RUSSIA	1.51	1.81	2.13	2.21	2.15	2.3	2.4	2.3	2.5	2.3	2.3	1.24	1.2
INDIA	0.56	0.67	0.62	0.65	0.61	0.6	0.6	0.6	0.6	0.7	0.7	0.78	0.8
WORLD	3.15	3.38	3.48	3.43	3.18	3	3.1	2.9	3	2.9	2.8	2.81	2.8

*Source: SWISS RE, SIGMA NO.6/2002 TO NO.3/2014*

The table explains the non-life insurance penetration in India as well as at the global level. Non-life insurance penetration is measured as a ratio of premium to Gross Domestic Product (GDP). It is clear from the table that non-life insurance penetration in India has shown a marginal increase during the period under study. It has increased from 0.56 % in 2001 to 0.8 % in 2013. The world-wide non-life insurance penetration has increased initially up to 2004 but thereafter declined and reached to 2.8% in 2013. USA is at the top followed by Germany and France in non-life insurance penetration. In India, it is lowest as compare to the other countries of the world under study during the post reform period.

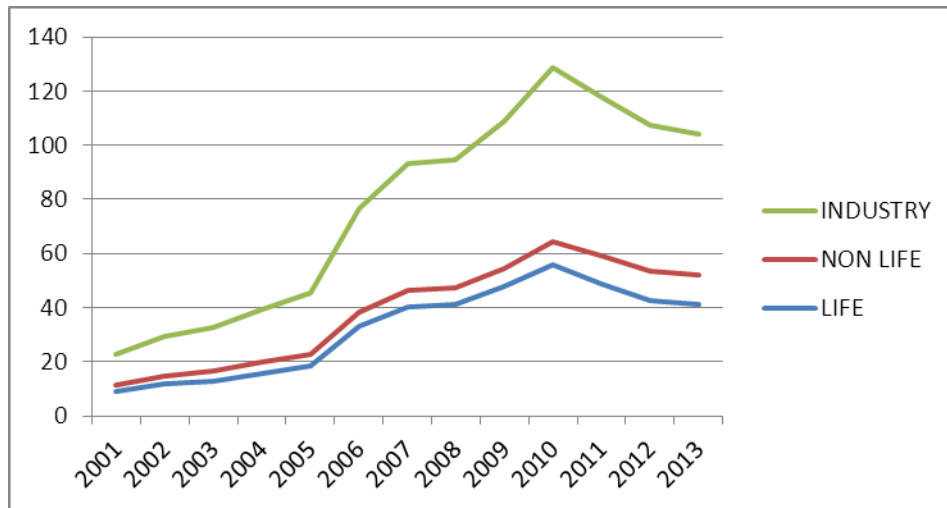
#### 4.8 Insurance Density and Penetration in India

Year wise detail of insurance density and penetration in India has been given in Table 1.8 and graph 1.1 and 1.2.

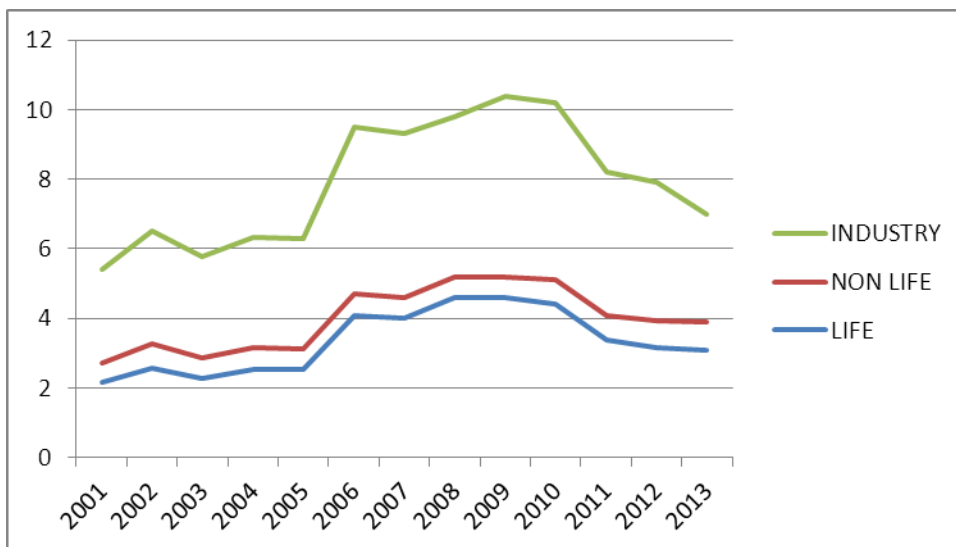
**Table 8.** Insurance Density and Penetration in India

	Year Density (US \$)			Penetration		
	LIFE	NONLIFE	INDUSTRY	LIFE	NONLIFE	INDUSTRY
2001	9.1	2.4	11.5	2.15	0.56	2.71
2002	11.7	3	14.7	2.59	0.67	3.26
2003	12.9	3.5	16.4	2.26	0.62	2.88
2004	15.7	4	19.7	2.53	0.64	3.17
2005	18.3	4.4	22.7	2.53	0.61	3.14
2006	33.2	5.2	38.4	4.1	0.6	4.8
2007	40.4	6.2	46.6	4	0.6	4.7
2008	41.2	6.2	47.4	4.6	0.6	4.6
2009	47.7	6.7	54.3	4.6	0.6	5.2
2010	55.7	8.7	64.4	4.4	0.7	5.1
2011	49	10	59	3.4	0.7	4.1
2012	42.7	11	53.7	3.17	0.78	3.95
2013	41	11	52	3.1	0.8	3.9

*Source: SWISS RE, SIGMA NO.6/2002 TO NO.3/2014*



**Graph 1.** Insurance Density in India



**Graph 2.** Insurance Penetration in India

It is evident from the table and from both the charts that since the opening of the insurance sector for private participation India has reported increase in both insurance density and penetration up to 2010. However, the increase has been almost entirely contributed by the life insurance sector. After 2011, it is showing a decline in the trend.

**5. Conclusion**

To study the growth of Indian Insurance Industry with reference to top economies of the world mainly three parameters i.e. insurance premium volume, insurance penetration and insurance density have been used. On the basis of the analysis of these parameters, we can conclude that Indian Insurance Industry has grown consistently during the period of study except last three years when it has shown some declining trend. No doubt, the rising trend of Indian Insurance Industry in all the parameters looks impressive, but if we compare the figures of Indian Insurance Industry with the figures of other top economies of the world, we are at the lowest level in almost all the parameters under study. So we can further conclude that despite the growth of Indian Insurance Industries after its opening up for private players, a lot is still needed to do, to accelerate its growth to compete at global level.

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