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INDIA'S PRESENT INSURANCE PENETRATION AND FUTURE POSSIBILITIES

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Short Profile

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ABSTRACT:

India accounts for more than 2% of the world's premiums and 6% of the premiums originating in Asia. The country is the tenth biggest insurance market in the world and has the potential to grow exponentially in the coming years. While regulatory hurdles and dominant incumbents bring challenges to foreign companies looking to enter the Indian insurance market, low penetration and opportunities in the market make it quite lucrative. In 2011, the life premium volume for India was $60 billion, a little over 3% of the GDP. The GDP is expected to grow at an average rate of 4.7% through 2018, and we expect life insurance penetration to increase to around 4.6% by 2019. This would make India a $120 billion market.

KEYWORDS

Insurance Penetration and Future Possibilities , Literature Review.

INTRODUCTION :

LITERATURE REVIEW

•The measurement time period can affect the penetration rate, author David J. Reibstein and his colleagues wrote in a May 2006 Financial Times Press excerpt from their book, "Marketing Metrics: 50+ Metrics Every Executive Should Master." For example, computer sales may spike during the weeks preceding the start of the September school year, which may lead to a higher penetration rate than normal for that period only.
•The market share of a brand is a factor of the brand penetration share, the heavy usage index and the share of requirements, according to Reibstein. The heavy usage index measures consumption intensity, while the share of requirements measures brand loyalty.
•The least risky strategy to increase market penetration is to sell more units of the current product, entrepreneur and former chief executive officer Keith McFarland told Darren Dahl of "Inc." in a February 2010 article. Companies may use different pricing and promotional strategies to achieve unit volume growth. Examples include six bars of soap in one package or a six-pack of beer.

A Brief History of the Market

Life insurance in the Indian market has been historically dominated by the government run Life Insurance Corporation (LIC). The company was formed in 1956 by incorporating all 154 private life insurance companies existing in the country at that time. However, following a strong wave of development throughout the country, the Indian government allowed privatization in the insurance industry in 2000, setting up the Insurance Regulatory and Development Authority (IRDA) to issue licences to private life insurers. Foreign direct investment (FDI) was also allowed up to a limit of 26%, which meant that non-Indian entities were allowed to hold up to 26% of equity/share capital in the Indian insurance companies.

As a result, 23 private companies, mostly joint ventures, entered the market. These companies include PNB Metlife India Life Insurance, Tata AIA Life, DLF Pramerica Life Insurance (a joint venture between Prudential Financial and DLF) and ICICI Prudential Life Insurance (a joint venture between British insurer Prudentialplc and ICICI). Following the de-nationalization, the life insurance industry took off. From 2000 to 2011, new business premiums (NBP) grew by 28% while gross written premiums increased by 25%. This growth propelled India into the list of the top 10 life insurance markets in the world. In 2011, the country accounted for 2.5% of the life insurance premiums written worldwide.

Market Penetration is a measure of brand or category popularity. It is defined as the number of people who buy a specific brand or a category of goods at least once in a given period, divided by the size of the relevant market population.

Insurance Penetration and Insurance density are the two basic Parameter often used to determine the level of development of the insurance sector in a country.

Here the insurance penetration is defined as the ratio of premium under written in a given year to the gross domestic product. The insurance penetration is impacted by several macro-economic factors such as growth, inflation, interest rates, small savings return and return of competing financial products offered by banks and mutual funds.

According to The economic Times

"Penetration rate indicates the level of development of insurance sector in a country. Penetration rate is measured as the ratio of premium underwritten in a particular year to the GDP".

METHODOLOGY

As per the objectives and nature of the study only secondary data is required thus the information is collected from Annual Report of IRDA and Various Reports Published by Ministry of India and also from other reliable publications.

An econometric model is used to conclude and forecast the future possibilities of insurance penetration in India.

Description: Within insurance, there is life insurance penetration which considers premiums from life insurance policies only as a percentage of GDP and nonlife insurance penetration which considers premium from other than life insurance policies like auto insurance, health insurance, etc.

GDP

Annual percentage growth rate of GDP at market prices based on constant local currency, aggregates are based on constant 2005 US dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

Interest Rate

The benchmark interest rate in India was last recorded at 8 percent. Interest Rate in India is reported by the Reserve Bank of India. From 2000 until 2014, India Interest Rate averaged 6.6 Percent reaching an all-time high of 14.5 Percent in August of 2000 and a record low of 4.3 Percent in April of 2009. In India, interest rate decisions are taken by the Reserve Bank of India's Central Board of Directors. The official interest rate is the benchmark repurchase rate.

The IRDA undertakes a sustained insurance education campaign under the brand name BimaBemisaal. The campaign seeks to educate the uninsured and the insured about the need for insurance, rights, obligations of policyholders etc through various media channels viz. print, radio and television. IRDA also supports consumer bodies in conducting seminars and workshops on insurance in various parts of the country in order to create awareness about insurance. The BimaBemisaal campaign is carried out in various Indian languages including Hindi, apart from English. IRDA has also brought out educational material for the public and policyholders. Further, to create awareness, IRDA over the last two years has started conducting yearly seminars exclusively on policyholder protection and welfare that brings together all stakeholders including consumer representatives.

To achieve the goal of study we take two components which affect the insurance penetration in most i.e. GDP and Interest Rate. Last 13 years data of GDP and Interest Rate is given in Table1.

TABLE 1 last 13 year data of GDP and Interest Rate

Year	Insurance Penetration (Y)	GDPGrowth (X_1)	Interest Rate (X_3)
2000	1.39	3.8	9.8
2001	1.77	4.8	6.9
2002	2.15	3.8	5.92
2003	2.59	7.9	4.82
2004	2.26	9.3	4.79
2005	2.53	9.3	6.75
2006	2.53	9.8	7.00
2007	4.10	3.9	6.93
2008	4.00	8.5	4.44
2009	4.00	10.5	5.20
2010	4.60	6.3	7.52
2011	4.40	3.2	8.12
2012	3.40	5	7.55

Where: -

Y = Insurance penetration – Dependent variable
X1 = Gross domestic product – Independent variable
X2 = Interest Rate on small savings – Independent variable
Model = Econometrics multiple regression model $Y = \beta_1 + ß_2X_1 + ß_3X_2 + ut$

where:

$$\hat{\beta}_1 = \bar{Y} - \hat{\beta}_2\bar{X}_1 - \hat{\beta}_3\bar{X}_2$$

$$\hat{\beta}_2 = \frac{(\Sigma x_1 y)(\Sigma x_2^2) - (\Sigma x_2 y)(\Sigma x_1 x_2)}{(\Sigma x_1^2)(\Sigma x_2^2) - (\Sigma x_1 x_2)^2}$$

$$\hat{\beta}_3 = \frac{(\Sigma x_2 y)(\Sigma x_1^2) - (\Sigma x_1 y)(\Sigma x_1 x_2)}{(\Sigma x_1^2)(\Sigma x_2^2) - (\Sigma x_1 x_2)^2}$$

$$\bar{X}_1 = \frac{\Sigma X_1}{N} = \frac{86.1}{13} = 6.62$$

$$\bar{X}_2 = \frac{\Sigma X_2}{N} = \frac{85.74}{13} = 6.60$$

$$\bar{Y} = \frac{\Sigma Y}{N} = \frac{40.32}{13} = 3.10$$

Table 2 Calculation Table

Year	Insu. Y	GDP X_1	Interest X_2	$(X_1 - \bar{X}_1)$ β_1	x_1^2	$X_2 - \bar{X}_2$ β_2	x_2^2	(Y -Y) y	$\beta_1 \beta_2$	$\beta_1 y$	$\beta_2 y$
2000	1.39	3.8	9.8	-2.82	7.9524	3.2	10.24	-1.71	-9.024	4.8222	-5.472
2001	1.77	4.8	6.9	-1.82	3.3124	0.3	0.09	-1.33	-2.4206	2.4206	-0.399
2002	2.15	3.8	5.92	-2.82	7.9524	0.63	0.4624	-0.95	-1.9176	2.679	-0.646
2003	2.59	7.9	4.82	1.28	1.6384	-1.78	3.1684	-0.51	-2.2784	-0.6528	+0.9078
2004	2.26	9.3	4.79	2.68	7.1824	-1.81	3.2761	-0.84	-4.8508	-2.2512	+1.5204
2005	2.53	9.3	6.75	2.68	7.1824	0.15	0.0225	-0.57	+0.402	-1.5276	-0.0855
2006	2.53	9.8	7.00	3.18	10.1124	0.40	0.16	-0.57	+1.272	-1.8126	-0.228
2007	4.10	3.9	6.93	-2.72	7.3984	0.33	0.1089	1.00	-0.8976	-2.72	+0.33
2008	4.00	8.5	4.44	1.88	3.5344	-2.16	4.6656	0.90	-4.0608	1.692	-1.944
2009	4.00	10.5	5.20	3.88	15.0544	-1.4	1.96	0.90	-5.432	3.492	-1.26
2010	4.60	6.3	7.52	-0.32	0.1024	0.92	0.8464	105	-0.2944	-0.48	+1.38
2011	4.40	3.2	8.12	-3.42	11.6964	1.52	2.3104	1.3	-5.1984	-4.446	+1.976
2012	4.00	5.0	7.55	-1.62	2.6244	0.95	0.9025	0.9	-1.539	-1.458	+0.855
					85.7432	**1.30**	**28.2081**		**36.2396**	**-0.2424**	**-3.0653**

$$\hat{\beta}_2 = \frac{(\Sigma x_1 y)(\Sigma x_2^2) - (\Sigma x_2 y)(\Sigma x_1 x_2)}{(\Sigma x_1^2)(\Sigma x_2^2) - (\Sigma x_1 x_2)^2}$$

$$\hat{\beta}_2 = \frac{(-0.2424)(85.7432) - (-3.0653)(36.2396)}{(85.7432 \times 28.2081) - (36.2396)^2}$$

$$\hat{\beta}_2 = \frac{-20.78415 + 111.0852}{2418.6527 - 1313.3086}$$

$$\hat{\beta}_2 = \frac{90.30105}{1105.3441}$$

$$\hat{\beta}_2 = 0.0817$$

$$\hat{\beta}_3 = \frac{(\Sigma x_2 y)(\Sigma x_1^2) - (\Sigma x_1 y)(\Sigma x_1 x_2)}{(\Sigma x_1^2)(\Sigma x_2^2) - (\Sigma x_1 x_2)^2}$$

$$\hat{\beta}_3 = \frac{(-3.0653 \times 85.7432) - (-0.2424)(-3.0653)}{1105.3441}$$

$$\hat{\beta}_3 = \frac{-262.8286 - 0.7430}{1105.3441}$$

$$\hat{\beta}_3 = \frac{-263.5716}{1105.3441}$$

$$\hat{\beta}_3 = -0.24$$

$$\hat{\beta}_1 = \bar{Y} - \hat{\beta}_2 \bar{X}_1 - \hat{\beta}_3 \bar{X}_2$$

$$\hat{\beta}_1 = 3.10 - 0.817\,(6.62) - (0.24\,(6.60)$$

$$\beta_1 = 3.10 - .5408 + 1.5888$$

$$\hat{\beta}_1 = 4.148$$

NOW $Y = 0.4488 + 0.1655x_1 + 0.2357\,x_2$

Table 3 Forecasting of Insurance Penetration

	GDP	Interest Rate	Forecasting of Insurance penetration
Case I	10%	9.00	.4488 + (.1655 x 10) + (.2357 x 9) = 4.2251
Case II	9%	9.00	.4488 + (.1655 x 9) + (.2357 x9) = 4.0596
Case III	6%	6.00	.4488 + (.1655 x 6) + (.2357 x6) = 2.8560
Case IV	10%	8%	.4488 + (.1655 x 10) + (.2357 x 8)= 3.9894
Case V	8%	10%	.4488 + (.1655 x 8) +(.2357 x 10) = 4.1298

CONCLUSIONS:-

our parameter show that in case of Indian insurance penetration GDP affect around 16.55% and interest rate affect around 23.57% so in the future Indian G.D.P. predication we may assume and predict the insurance penetration possibilities in India. In final we can say that if govt. Increase their GDP as well as interest Rate on small savings simultaneously it will definitely increase the Indian insurance penetration. Because only GDP will not sufficient factor to increase the insurance penetration in India. As shown by the figure if GDP is 10% and Interest rate is 8% then Insurance penetration would be 3.9894 where if GDP is 8% and Interest rate is 10% then insurance penetration would be 4.1298. Which show that interest Rate are more contributories to increase the India's insurance penetration.

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