PROFITS & PREMIUM EARNED BY GENERAL INSURANCE COMPANY'S AFTER LIBERALIZATION: AN ANALYSIS

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ABSTRACT

Insurance is an important part for the economic development of a nation. Through insurance the risk of economic development is protected by spreading the risk both nationally and globally. The growth of the general insurance industry in India has seen significant levels of top line growth (Net premium) over the last few years. There has been a severe stress on the profitability of the insurers in India with the introduction of de-tariff, which has lead to a severe price war and occurrence of major claims.
The paper provides an understanding of growth of the general insurance industry in India and its effect on the profitability of the entire sector. The paper is also expected to bring about the causes for the decline in the profits for the general insurance industry even with the tremendous top line (premium) growth the industry is experiencing.

***Keywords**: General Insurance, Premium, Indemnity, Growth, Claim, Profit, De-tariff, Peril, Nationalization, Privatization, Reinsurance, IRDA, TAC, Correlation, Regression, Insurer, Insured, Banc-assurance, Broker, Malicious Damage, Inundation, Hypothesis, Primary, Secondary.*

Introduction:

Insurance is a contract between two parties whereby one party agrees to undertake the risk of another in exchange for consideration known as premium and promises to indemnify the other party on happening of an uncertain event.
Insurance has been identified as a sunrise sector by the financial planners of India. The insurance industry has lot of potential to grow, penetrate and service the masses of India. The researcher will be analyzing the growth in net premium (turnover) over the years and their impacts on the profitability of the general insurance companies and establish a relationship between them.
General Insurance would appear to have developed with the industrial revolution in the west and consequent growth of trade and commerce through sea in the seventeenth century.
History of General Insurance in India dates back to 1850, when Triton Insurance Company Ltd. was established in Kolkata whose share was mainly held by the British. The first insurance company to be set up by Indians for transacting all classes of general insurance business was Indian Mercantile Insurance Company Ltd. in 1907.
In the year 1999 the government of India opened up the Insurance sector. As a result the private players were allowed to enter the market with foreign partnership in the year 2000.
For a general insurance company, underwriting business is the basic core activity. All other activities, in fact, emanate from this core activity only. Not much attention was being paid to this core activity in the nationalized set-up under tariff era. Underwriting was reduced to referring to the pages of tariff. The customer has to tailor his needs according to the available products. In an environment like this the underwriting skill and expertise development saw a decline. Then came the liberalization of insurance sector and gradual withdrawal of tariff with the ultimate aim of ushering in a fully tariff free regime. Suddenly underwriting became all important. The environment became very competitive. Profit and solvency concern forced insurance companies to re-

look at their underwriting operation. Like having an underwriting policy in place and getting the pricing actuarially evaluated.

Three Phases of De-tariffing are-
- 1994 - marine cargo, personal accident, health, bankers liability, aviation
- 2005 - marine full segment
- 2007 – Fire, engineering and motor own damage pricing liberalized with effect from January 2007.

Literature Review:
Conceptual Review:
Meaning of Insurance:

Insurance is a legally binding agreement between an insurer and insured where the insurer agrees to indemnify the insured in the event of a loss in return for a consideration. It works on the basic principle of risk-sharing. A great advantage of insurance is that it spreads the risk of a few people over a large group of people exposed to risk of similar type.

Reason one needs insurance:

The products offered by the general insurance companies are beneficial in the following ways-
- It helps protect business/individuals against any losses towards their assets, properties due to any natural disaster, fire, burglary, accidental external means etc.
- It helps protect business against statutory liabilities.
- General insurance provides employee benefit covers like health, personal accident etc.
- It protects against loss of profit to a business when its operations stop because of an accident which has occurred due to an insured peril.

Distribution Channels of a non – life Insurer:

A non-life Insurer approaches the market through different channels to distribute its products. The major channels are:

1. Agency
2. Broker
3. Banc-assurance
4. Direct customer sale
5. Internet Marketing
6. Affinity Partners

The products offered by the general insurance companies are:

1. Motor Insurance policies it mainly covers own damage to the vehicle, third party bodily injury or death or property damage.
2. Standard Fire & Special Perils Policy covers loss or damage to property caused by the perils named in the policy. The major perils covered under the policy are Fire, Lightning, Riots, Strike, Malicious Damage, Storms, Cyclone, Typhoon, Tempest, Flood, Inundation etc.
3. Engineering Insurance policies can be segmented as:
Operational Policies are mainly Contractor plant and machinery & Machinery Breakdown Policy.
Project Policies are Contractors All Risk Policy & Erection All Risk Policy.
4. Marine Policy covers loss or damage to the goods during transit.
5. Liability policies are Product Liability, Public Liability & Professional Indemnity Policy.
6. Miscellaneous Policies can be Burglary Insurance, Money Insurance, Fidelity Guarantee Insurance, Personal Accident & Health Insurance Policy.

Non – Life Insurers operating in India (private)
Royal Sundaram, TATA Aig, Reliance General, Iffco Tokio, ICICI Lombard, Bajaj Allianz, HDFC Ergo, Cholamandalam, Future Generali, Bharati Axa, Raheja QBE, SBI General, Universal Sompo, Shriram General, L&T General, Star Health & Allied Insurance, Max Bupa.
Non – Life Insurers operating in India (public)
The New India, National, United India & Oriental Insurance.

Contextual Review of Research Papers:

In the past two decades, the liberalization and subsequent growth of Indian Insurance industry has become a buzz word and researchers have explored and probed this aspect.

Sinha, T. (2004), in his paper tried to explore, challenges and prospects of the Indian Insurance industry. Following the passage of the Insurance Regulatory and Development Authority Act in 1999, the insurance industry adopted market driven competition replacing the exclusivity of the public sector. With the improvement of India’s economic fundamentals there has been phenomenal growth in the last decade. However, by comparing the Indian insurance market with its regional counterparts on the basis of growth, penetration, density and other insurance variables, author have opined that although India’s insurance market is underdeveloped but it has huge potential to grow.

Prior J Tony, have shown in his paper that a series of financial losses to the insurance industry poses a big question before underwriting practices. There are many a challenges before the underwriters and risk managers for a better economic assessment particularly in the areas of oil, gas, petrochemicals, power, hot metals, etc. This paper attempts to integrate an appraisal program as an inbuilt risk management strategy.

Rajeswari and Kartheeswari (2011), in her paper analyzed the role of private player’s in general insurance market and have concluded that the quantitative performance of the private players is not up to the mark in general insurance, but their innovative way of marketing will certainly be a challenge to the government cared players in future.

Singh and Kumar (2011), in their study attempted to compare the efficiency of Indian public sector general insurance companies during the pre- and post-reform periods. The results reveal that the efficiency of the public sector general insurance companies is higher in the post-reform period than the pre-reform period.

Garg and Deepti (2008), have published a paper on Efficiency of General Insurance industry in India in the post liberalization era. Liberalization of the insurance sector in India has contributed favorably to insurance growth.

Avram, Nguyen and Skully (2010), in their paper made a cross country examination of insurance and economic growth. It was found that insurance has a significantly positive relationship with economic growth, especially with the insurance density measure.

Singh and Kumar (2010), have explored Product portfolio trends in Indian General Insurance Industry. The study concludes that the Indian general insurance industry lacks balanced product portfolio performance, as the companies emphasize only few portfolios like motor, fire, health, etc., where the need of the hour is to have a balanced portfolio performance to sustain general insurance penetration. So, the general insurance companies should market their entire portfolio to achieve balanced portfolio performance and increased insurance penetration.

Research Methodology:

Introduction to Research Methodology:

A research methodology defines what the activity of research is, how to proceed to measure progress. The type of data used in the research and what constitutes its success.

The character of statistical information collected can be of two types. The quantitative character is technically called variable and the qualitative character is called the attribute. A variable takes different ‘values’ and these can be measured numerically in suitable units. An attribute cannot be measured, but can only be classified under different heads and ‘categories’.

Statistical data can be of two types. One of them is the primary data and the other form is the secondary data. Primary data are collected directly from the field enquiry and hence they are original in nature. Secondary data are such numerical information which have previously been collected by some agency for one purpose and are merely compiled from that source for use in different connection. The data used for this research is secondary in nature.

Quantitative Gathering:

The statistical tools used by the researcher for the purpose of analysis are:

Correlation - The word correlation is used to denote the degree of association between variables. The two variables x and y are so related that variations in the magnitude of one variable tend to be accompanied by the variations in magnitude of the other variable, they are said to be correlated. The researcher has used correlation to find the association between profits and premium (turnover) of the insurance industry of India. The properties of correlation coefficient are:

1. The correlation coefficient r(x, y) is independent of origin of reference and these units in which the quantitative variables X and Y are measured.
2. r (x, y) lies between -1 and +1
3. It is a pure number and it measures the strength of association.

Regression Analysis – the term regression analysis can be defined as the measure of the average (or casual) relationship between two or more variables in terms of the original units of the data. This relationship is used to predict the most likely value of one variable for specified values of the other variable. One of the variables is called the independent or the explained variable and the other is called the dependent or the explaining variable.

Data Analysis:

As per (Table-1 and 2, given in the annexure) the combined growth of public and private insurance companies has been from Rs.8086crores for the financial year 2000-01 to Rs.44451crores for the financial 2011-12. The growth percentage is 350% i.e., growing at an average rate of 41%.

As per (Table 1 and 2, given in the annexure) there is no trend on the growth of Net Profit, it has incurred Profit as well as Loss in some years during the financial year from 2000-01 to 2011-12. It can further be proved through statistical analysis by Co-relation and Regression from the following data.

Year	Net Profit Rs.(Crs)	Net Premium Earned Rs.(Crs)
2000-01	384.42	8086.2
2001-02	-266.46	8928.25
2002-03	631.91	10199.58
2003-04	1425.36	11394.03
2004-05	1293.5	12899.97
2005-06	1473.66	14594.23
2006-07	3137.1	17689.56
2007-08	2249.31	21020.3
2008-09	397.07	24411.45
2009-10	1204.51	28078.91
2010-11	-1018.94	34932.81
2011-12	32.33	44451.00

	Column 1	*Column 2*
Column 1	1	
Column 2	-0.29746	1

As the correlation coefficient between profit and premium earned is negative it can be inferred that with the increase in premium earnings profitability declined. The value of the correlation coefficient (-.29746) also signifies that for every 100crore increase in premium profitability declined by 30% of the total profit. Thus there lies an inverse relationship between premium and profit.

Hypothesis:
Null Hypothesis:

H_0^1: β = 0 (No influence of premium earned on net profit)

Alternative Hypothesis:

H_1^1: β <> 0 (Premium earned influences net profit)
The R^2 value from the regression table is 0.088482469 which explains the 8% of relationship between premiums earned and net profit.
The computed P-value at 95% confidence level is 0.347739333 which is more than 0.05. This is the confidence with which the alternate hypothesis is rejected and the null hypothesis is accepted. Thus regression equation shows that there is no influence of premium earned on the net profit.
The regression equation can be written as
$Y= \alpha + \beta X$
$Y= 1494.755492- 0.029546688 X$
As the value of the regression coefficient is β = -.024. It also shows that profitability (Y) declines with the increase in premium.

Results:
Findings:

The findings from the analysis is listed below-

- The growth of net premium for the general insurance industry has been 41% during the period 2000-01 to 2011-12.
- No trend could be observed towards Growth of profit for the general insurance industry during the period 2000-01 to 2011-12.
- It is seen that during 2004-2005 the net profit for the industry is showing negative growth this is due to the natural calamities which occurred in Bombay. In the year 2007-2008 & 2008-09 there has been substantial decline in profit. Main reason being introduction of de-tariffing in the general insurance industry in the one hand and substantial increase in incurred claim ratio on the other hand. Again there has been major reduction in profit in 2010-11, in fact general insurance industry suffered a loss during this period. This is mainly due to Reinsurance loss suffered by New India Assurance co. Ltd. This denotes that undercutting of price due to competition is hitting the bottom line of the companies and not the top line.
- Review in reinsurance rates by several leading reinsurers due to increase in Terrorism risk, specially after World Trade Centre attack in USA and attack at Hotel Taj in India.
- Since the correlation coefficient between profit and net premium is negative it is proved that there lies and inverse relationship between them.
- As the value of the regression coefficient is b=-.024 we can conclude that profitability (Y) declines with the increase in Premium (X).

Recommendations:

- Policies needs to be priced correctly as per the risk involved.
- Actuarial pricing and sound underwriting practices to be brought into the market.
- Innovative customized products to be introduced which in turn will protect the price and bottom line of the companies.
- Distribution network should be expanded. The present network provides marginal support to agriculture and the agro-based economy.
- IRDA should regularly monitor and review the health of the insurance companies in order to protect the policy holder's money.

Conclusion:

The paper has been prepared from the secondary data collected through various books, references, journals and magazines published on the subject. It can be concluded that the insurance industry has tremendous scope to grow in terms of both profitability and Premium. This can be achieved by bringing in changes within the industry. Such as by providing customized products, penetrate newer segments, proper pricing of products and improving distribution network.
With better technological expertise coming in from the foreign partners and involvement by the IRDA the general insurance market in India should turnaround in the coming years.

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SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.29746003							
R Square	0.08848247							
Adjusted R Square	-0.0026693							
Standard Error	1132.18094							
Observations	12							
ANOVA								
	df	*SS*	*MS*	*F*	*Significance F*			
Regression	1	1244296.52	1244296.52	0.970716041	0.347739333			
Residual	10	12818336.85	1281833.685					
Total	**11**	**14062633.37**						
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	1494.75549	675.7894732	2.211865605	0.051398014	-10.99728241	3000.508267	-10.99728241	3000.508267
X Variable 1	-0.0295467	0.029989049	-0.985249228	0.347739333	-0.096366454	0.037273078	-0.096366454	0.037273078

Table 1: Underwriting Experience and Profits: Public Sector General Insurance Companies

Particulars		**ALL COMPANIES**										
	2011-12	**2010-11**	**2009-10**	**2008-09**	**2007-08**	**2006-07**	**2005-06**	**2004-05**	**2003-04**	**2002-03**	**2001-02**	**2000-01**
Net Premium	2774023	2231046	1813297	1589946	1386159	1301640	1175197	1111795	1032800	963813	874492	808576
Claims incurred (Net)	2224206	1959914	1496723	1363779	1212481	1053875	1056985	907539	825330	769114	788900	702036
	83.18%	87.85%	82.54%	85.78%	87.47%	80.97%	89.94%	81.63%	79.91%	79.80%	90.21%	86.82%
Commission, Expenses of Management	850375	815015	652958	552667	458406	427906	470113	422112	405154	297461	259167	216511
	30.65%	36.53%	36.01%	34.76%	33.07%	32.87%	40.00%	37.97%	39.23%	30.86%	29.64%	26.78%
Increase in Reserve for Unexpired Risk	281182	211066	117733	96189	45331	64971	31763	40082	24164	40962	27555	29867
	10.14%	9.46%	6.49%	6.05%	3.27%	4.99%	2.70%	3.61%	2.34%	4.25%	3.15%	3.69%
Underwriting Profit / Loss	(581739)	(754950)	(454118)	(422690)	(330059)	(245112)	(383664)	(257938)	(221848)	(143724)	(201130)	(139838)
	(23.34%)	-37.37%	-26.78%	-28.30%	-24.62%	-19.82%	-33.55%	-23.20%	-21.48%	-14.91%	-23.00%	-17.29%
Gross Investment Income	742426	784220	634727	479978	624751	578423	561063	433018	381820	251988	218848	208049
Other Income Less other Outgo	(27268)	(31744)	(26715)	529	(15292)	(11337)	(19112)	(2169)	(3113)	(24088)	(31173)	(19979)

Profit Before Tax	133419	(2473)	153894	57818	279400	321974	158286	172911	156859	84176	(13455)	48232
Income Tax Deducted at Source and Provision for Tax	(18171)	(13678)	(24587)	(7985)	58851	31238	26358	55751	21027	21660	7015	6330
Net Profit after Tax	115248	(16151)	129307	49833	220548	290736	131928	117160	135832	62516	(20470)	39818

Note: Figures in bracket represents negative value.
Source: Website of Insurance Regulatory & Development Authority.

Table 2: Underwriting Experience and Profits: Private Sector General Insurance Companies

Particulars		**ALL COMPANIES**										
	2011-12	**2010-11**	**2009-10**	**2008-09**	**2007-08**	**2006-07**	**2005-06**	**2004-05**	**2003-04**	**2002-03**	**2001-02**	**2000-01**
Net Premium	1671077	1262235	994594	851199	715871	467316	284226	178202	106603	56145	18333	44
Claims incurred (Net)	1275579	993731	730725	607916	424631	250289	154822	91173	54336	29225	4224	2
	76.33%	78.73%	73.47%	71.42%	59.32%	53.56%	54.47%	51.16%	50.97%	52.05%	23.04%	4.55%
Commission, Expenses of Management	470285	391707	313976	292715	223178	128337	77740	48687	29617	19765	12725	2492
	28.14%	31.03%	31.57%	34.39%	31.18%	27.46%	27.35%	27.32%	27.78%	35.20%	69.41%	5663.64%
Increase in Reserve for	225159	118742	90141	60256	127951	99333	56651	38092	29023	16987	14140	-
Unexpired Risk	13.47%	9.41%	9.06%	7.08%	17.87%	21.26%	19.93%	21.38%	27.23%	30.26%	77.13%	-
Underwriting Profit / Loss	(299945)	(241945)	(140248)	(109687)	(59890)	(10642)	(4987)	250	(6373)	(9832)	(12756)	(2534)
	(20.74%)	-21.16%	-15.51%	-13.87%	-10.19%	-2.89%	-2.19%	0.14%	-5.98%	-17.51%	-69.58%	-5759.09%
Gross Investment Income	208355	153963	133429	109120	74205	41504	26947	18442	15432	11694	6747	1458
Other Income Less other Outgo	(12367)	1983	3399	(4343)	1204	975	123	(682)	(494)	54	(730)	(170)
Profit Before Tax	(103946)	(85999)	(3420)	(4910)	15519	31837	22085	18010	8565	1916	(6739)	(1281)
Income Tax Deducted at Source and Provision for Tax	(8069)	256	(5436)	(5216)	11136	8863	6645	5820	1861	1241	(564)	95
Net Profit after Tax	(112015)	(85743)	(8856)	(10126)	4383	22974	15438	12190	6704	675	(6176)	(1376)

Note: Figures in bracket represents negative value.
Source: Website of Insurance Regulatory & Development Authority.

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