A Study on Performance of Life Insurance Industry in India

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ABSTRACT

Purchasing life insurance is more than just a moneymaking venture. Mobilizing resources for development is important, but so is ensuring the safety of the population. It connects the here and now with the future. At present, India's economy is among the world's quickest expanding ones. It boasts the world's tenth highest GDP and is the third largest economy in Asia (GDP). In 2010–2011, the service sector contributed 9.30 percent to the overall GDP growth rate. The globalisation of the insurance industry has altered its profile, and this trend is visible in the Indian market. Insuring people's financial security is a rapidly expanding market. There have been many shifts in the life insurance market in India during the past decade. Insurers now face a new set of difficulties as a result of the changed economic landscape brought on by globalisation, privatisation, and liberalisation. It must now become more competitive in order to keep up with the wants and needs of its customers. India's life insurance business is ripe for national and international investment due to the country's massive population and extensive undeveloped infrastructure. Changes in operating activity, such as selling new policies, appointing active agents, offering commission to the agents, and assessing maturity value, have also altered life insurance firms' profitability. Businesses in the private sector have seen greater insurance market expansion than those in the public sector.
KEYWORDS: *Life Insurance, GDP, profitability, growth, economy, competitive.*

I. INTRODUCTION

Life insurance is a vital aspect of India's service industry. The growth of our country's economy is directly tied to its success. It serves as an individual's savings, financial mediator, promoter of investment activities, and stabiliser of financial markets, in addition to protecting against the risk of death. As a result, inconvertible long-term funds are created for nation-building and the quality of life for the people is improved. The spread of new technologies and the accumulation of capital are both aided by the resources made available by financial institutions, making them crucial to the process of economic progress. The efficiency and economic growth that result from developed financial systems that perform their jobs well are both a win-win. These include guiding individuals with modest savings accounts towards more substantial investments.

There have been many shifts in the life insurance market in India during the past decade. Insurers now face a new set of difficulties as a result of the changed economic landscape brought on by globalisation, privatisation, and liberalisation. It must now become more competitive in order to keep up with the wants and needs of its customers. Insurance consumers now have a better idea of the variety of plans available to them and the competitive pricing structure in the industry thanks to measures that helped open up competition among insurers. Consumers have a solid understanding of their legal protections, available channels for resolving disputes, and the trend toward price transparency and deregulation in the insurance market. Incorporating the technical know-how, knowledge, and vast experience of multinationals, the Indian corporations have changed nearly every facet of the sector.

Life Insurance in India

The pioneering insurance firm that offered fair value policies to Indians, was the Bombay Mutual Life Assurance Society that may have begun operations in 1871. For the following century, only the well-off people in major cities could afford to purchase life insurance. In order to make life insurance more accessible to all Indians, the LIC was established in 1956 by the LIC Act of Parliament. On December 2, 1999, the Loksabha and, later, the Rajyasabha, approved the Insurance Regulatory and Development Authority (IRDA) Bill, which would open the insurance business in India to private and foreign firms. After this law was passed, private companies began to enter the market at a faster rate each year. There were 23 private companies in India as of March 31, 2011.

II. Review of Literature

Multichannel insurers, direct insurers, and independent agent insurers were the three types of German life insurance companies that Gamarra (2007) categorised by their predicted cost and profit efficiency. An efficiency sample of German life insurers from 1997-2005 is analysed using nonparametric DEA to assess overall efficiency. After conducting a series of experiments, she concluded that there is no comparable performance advantage for specialised insurers, providing economic support for the coexistence of the different distribution systems. Additionally, she discovered proof of scale economies in the German life insurance sector. The first researchers to analyse the life insurance industry's productivity in India, Tone and Sahoo (2005) used a novel cost-effectiveness approach to analyse LIC of India's results. The results reveal considerable variation in the cost-effectiveness ratings over a 19-year time frame. If LIC's performance started to drop after 1994–1995, that could be a sign that the massive up-front fixed cost it incurred to modernise its operations was causing increasing allocative inefficiencies. However, a notable improvement in cost effectiveness in 2000–2001 gives hope that LIC may finally be reaping the rewards of such modernization. In the long run, this will help them out against the competition. The sensitivity analysis findings are consistent with the study's overall conclusions.

Need of the Study

Till 1999, there was just one public Insurer –Life Insurance Corporation of India. Twenty-three private companies have entered the insurance market since liberalisation and privatization, began in the 1980s, creating enormous new possibilities. Now that they face competition from private sector firms, state-owned LIC must re-evaluate its guiding principles and operational practises. Market share for state life insurers has been steadily dwindling since deregulation, largely as a result of the private sector's unsuccessful advertising campaigns. In order to sustain in the industry, firms opt numerous novel plans at inexpensive premiums and upgraded services to withhold their existing policy holders and to attract new ones. The company's future success may hinge on whether or not it takes a proactive approach to product development, advertising, customer service, and the handling of claims and settlements. It's possible that this will have an effect on insurers' productivity and bottom lines. So, the researcher decided to check in on how well these businesses are doing now that India has liberalised its economy. Thus, certain inquiries were prompted: What is the growth and advancement of the life insurance firms in India since liberalisation? What forces are diminishing the profitability of India's life insurance firms?

Objectives of the Study

The following are the objectives of the study:
• To analyze the growth and progress of the Indianlife insurance companies in post- liberalizationperiod.
• To examine the factors influencing the financialefficiency of the life insurance companies in India.
• To offer findings and to make suggestions forthe improvement of Insurance companies in India.

Hypothesis of the Study

The following theories are being tested in this investigation. No correlation between Gross premium, Number of Companies, Claims Paid, Operating Expenses, Commission Expenses, Income from Investments, Number of Agencies, Number of Policies, or Profitability are statistically significant.

Research Methodology

By carrying out Analytical study the performance oflife insurance companies in India are determined.The present study is based on secondary data. Datafor this study are obtained from the IRDA (InsuranceRegulatory Development Authority) annual reports,Bulletins and statement of accounts of the variousLife Insurance Companies.

Period of the Study

The study covers a period of ten years from theaccounting year 2001-2002 to 2010-2011.

Sampling Design

Among 24 Life Insurers in India 12 life insurancecompanies have been selected through PurposiveSampling method. The selection method is basedon the first date of incorporation of the life insurancecompanies. The following table shows the list ofinsurance companies selected for this study.

List of sample companies included in the present study

Table - 1 : Insurance Companies in India

Sl.No.	Insurance company	Date of Incorporation
1	Life Insurance Corporation of India	01.09.1956
2	HDFC standard life insurance	23.10.2000
3	Max New York life insurance	15.11.2000
4	ICICI prudential life insurance	24.11.2000
5	OM Kotak life insurance	10.01.2001
6	Birla Sun life insurance	31.01.2001
7	Tata AIG life insurance	12.02.2001
8	SBI life insurance	29.03.2001
9	ING Vysya life insurance	02.08.2001
10	Allianz Bajaj life insurance	03.08.2001
11	Met Life India insurance	06.08.2001
12	Reliance Life insurance	03.01.2002

(Source : Secondary data)

Framework of Analysis

Multiple Regression Analysis

Multiple regression is a statistical process by whichseveral variables are used to predict another
Variable. The following formula was used:

$Y = a + B_1 X_1 + B_2 + \ldots + B_n X_n$ While selecting the independent variables to a larger
Extent, variables which were less correlated wasselected in order to avoid multicollinearity problem.The F ratio and p value for the model were alsocomputed to test their significance. If the computedp value was lower than the critical level of d=0.05the model was determined as statistically significant.The co-efficient of determination R^2 was alsocomputed to find the percentage of the explainingpower of the model R^2 which would always increasewhen all independent variables are added; adjustedR^2 will come down if the added variable does not
Reduce the unexplained variations. The adjusted $R^2$was calculated by
Adjusted $R^2 = 1 - (1 - R^2)(N-1)/(N-K)$
N = Number of Sample observations
K = Number of parameters

III. Result and Discussions

If the adjusted R^2 is close to R^2 the addition of anyfurther independent variable would not help in betterprediction, when there is a wide difference, it is anindication of the need for the inclusion of some moreindependent variables. Further the best subsetregression was computed by generating all thepossible combinations of the selected independentvariables. The two variables model with higher $R^2$was chosen as the best model.

Compound Annual Growth Rate
Compound Annual Growth Rate of the variable iscomputed per annum. The following formula is usedto compute the growth rate.When there is a continuous growth of the variable
the formula is used:(End value / Beginning value) 1-n-1
Where n = Number of years
When there is a variable growth of the variable theformula used is:
N (1+r1))1+r2) (1+rn)—1
R growth rate
All the ratios are used to find out the growth rate ofvariables.

Table - 2 : Multiple Regressions

Sl.No.	Company's	R2	Adj R2	't'	Significant
1	LIC	.990	.908	.195	.219
2	BIRLA	1.000	.999	5.141	.001
3	ICICI	.837	.267	-1.889	.463
4	ING	1.000	.997	-4.375	.041
5	HDFC	.999	.988	-.928	.078
6	MAX NEW	.923	.655	1.113	.243
7	RELIANCE	.997	.991	2.728	.001
8	TATA AIG	1.000	.999	-5.536	.017
9	MET LIFE	.961	.826	1.919	.129
10	SBI LIFE	1.000	1.000	4.875	.009
11	BAJAJ ALLIANCE	1.000	1.000	.585	.000
12	KOTAK	.978	.804	-1.906	.316

(Source : Secondary data)

Based on the data presented above, it is apparent that the hypothesis is accepted (no significant) for all of the influential factors studied: gross premium, number of companies, claims paid, operating expenses, commission expenses, income from investment, number of agencies, number of policies, and profitability. Multiple regression analysis of profit drivers is displayed in Table 2. The LIC's model accounts for 99.99 percent of the variance in profits. Since the corrected R^2 is already quite high, there's no reason to add any more variables. In this case, the calculated P values of .219 were larger than the .05% threshold. Agencies are nearing the 0.05 significance level (0.18). All of the variance in its profit may be traced back to the BIRLA. Since the corrected R^2 is already quite high, there's no reason to add any more variables. Calculated P values (.001) were lower than the 0.05 level of significance. At the 5% significance level, the firms are noteworthy (0.009). Eighty-three percent of the variance in ICICI's net profit was accounted for by the company itself. The R^2 after adjustments is not nearer to R^2. In this case, the calculated P values (.463) were larger than the .05 threshold. As a result, the companies' significance level (.19) is relatively near to the level of significance (.05). The ING controls all of its financial outcomes. Since the corrected R^2 is already quite high, there's no reason to add any more variables. In this case, the calculated P values of .041 were more than the 0.05 threshold. It's more likely than not that the claims will be rejected at the 0.05 threshold (0.10).

One hundred and ninety-nine per cent of the HDFC's profit variance is under its control. Since the corrected R^2 is already quite high, there's no reason to add any more variables. The calculated P values (.078) were greater than the 0.05 level of significance. Expenditures are hovering around the 0.05 percent mark (0.13).

A staggering 92% of its profit swings can be attributed to the MAX NEW. Adjusted R^2 is not similar to R^2 All calculated P values were more than the .243 threshold required to reject the null hypothesis. The fixed assets (0.32) are the only variable that comes close to the 0.05 level. The RELIANCE accounts for 99.99 percent of the company's profit variance. Since the corrected R^2 is so near to R^2, it's clear that no further variables are required. When the claims and operational expenses (0.001) are significant at the 0.05 level, the computed P (.001) values are smaller than the critical value. TATA AIG accounted for every penny of profit variance. Compared to R^2, the corrected version is pretty similar. Thus, it is not necessary to include any additional variables. The calculated P values (.017) were larger than the crucial value (.05). The claims are around the 0.05 threshold (.084). Approximately 96% of its profit variance is explained by the MET LIFE. The R^2 after adjustments is not nearer to R^2. When all of the variables are significant at the .05 level, the calculated P values were .129 greater than the critical value. The SBI LIFE accounted for all of the shifts in its bottom line. Equal to R^2 is the adjusted R^2. Thus, it is not necessary to include any additional variables. At the 0.05 significance level, the calculated P values were higher than the critical threshold (.009). In this case, the commission costs (0.036) are quite near to the 0.05 threshold. The BAJAJ ALLIANCE owns all of the profit swings. Equal to R^2 is the adjusted R^2. Policies (0.005) are significant at the 0.05 level because their computed P values (.000) were lower than the crucial threshold (0.05). 97% of its earnings variance is explained by the KOTAK. The R^2 after adjustments is not nearer to R^2. P values of 0.316, which were calculated, were larger than the .05 threshold required for significance. When all variables are deemed to be greater than the 0.05 level, this model is not statistically significant.

Table – 3 : Annual Growth Rate

Year	LIC	BIRLA	ICICI	ING	HDFC	MAX NEW	RELLIA-NCE	TATA AIG	MET LIFE	SBI LIFE	BJAJA ALLIANCE	KOTAK
2002-03	0.05	52.63	107.14	300.00	350.00	53.33	105.88	116.67	166.67	100.00	94.12	211.11
2003-04	0.23	41.38	137.93	62.50	44.44	43.48	37.14	100.00	100.00	90.00	48.48	39.29
2004-05	0.05	29.27	57.97	46.15	246.15	93.94	66.67	53.85	118.75	63.16	212.24	10.26
2005-06	1.05	83.02	60.55	78.95	66.67	31.25	96.25	80.00	22.86	48.39	270.59	6.98
2006-07	3.65	52.58	233.14	169.12	198.67	40.48	1.27	23.61	23.26	200.00	54.67	63.04
2007-08	9.60	263.51	235.85	44.81	27.01	64.41	368.55	217.98	77.36	44.93	14.82	101.33
2008-09	20.14	22.68	7.35	0.00	7.03	263.40	53.69	60.42	102.13	144.50	15.59	31.13
2009-10	7.26	-1.21	-8.61	-4.15	-6.73	0.00	8.91	-3.30	34.21	1.02	-1.12	8.59
2010-11	3.72	-5.37	-27.02	-2.76	-12.32	-28.51	0.08	-17.31	5.88	27.33	-5.13	-5.58

(Primary Data)

Based on the number of LIC businesses, the maximum annual growth rate was found to be 20.14 percent in 2008–09 and the minimum was found to be 0.05 percent in 2002–03 and 2004–05. During 2007-08, LIC saw an average increase in its number of businesses of 9.60 percent. Number of enterprises in BIRLA increased by a maximum of 263.51 percent in 2007-08 and a minimum of -5.37 percent in 2010-11. In 2005-06, the average annual growth rate was 8.30 percent. While ICICI's growth peaked at 235.85 in 2007–08, it hit a low of 27.02 in 2010–11. The best year for ING growth was 2001-02, with a total of 300.00, while the worst year was 2010-11, with a total of -2.76. In 2002-03, HDFC saw its highest annual growth rate of 350.00 percent. In 2010-2011, growth hit a minus 12.32 percentage points, the lowest level on record. Annual growth for MAX NEW averaged a healthy 263.40 in 2008–09. The lowest point before the decline, at 28.51, came in 2010–11. Maximum expansion was seen at TATA AIG in 2007-08 (217.98), while minimum contraction was seen at TATA AIG in 2010-11. (17.31). The MET LIFE's growth rate has been setting new lows since 2001–02. The biggest rate of increase occurred in 2002-03, when the value hit a record high of 166.67. In 2010-2011, the growth rate was 5.88 percent, the lowest ever recorded. The best annual growth rate ever recorded by SBI LIFE was 200 in 2006–07, and the worst was 1.02 in 2009–10. In 2010-11, the growth rate for KOTAK was -5.58 percent, whereas in 2002-03, the growth rate was 211.11. From 2001-02 to 2010-2011, RELIANCE's annual growth rate dropped from 105.88 to 0.08. The year 2007-2008 saw the greatest expansion (368.55). When compared to its all-time high of 270.59 in 2005-06, BAJAJ ALLIANCE's negative growth rate in 2010-11 was 5.13.

IV.   Findings

When comparing insurance providers using Multiple Regression Analysis, we discover that BIRLA, RELIANCE, and BAJAJ ALLIANZE are statistically significant at the 0.05 level. All factors are statistically significant at the 0.10 level or higher for MET LIFE and KOTAK, whereas the other companies in the analysis are much closer to the significant threshold. According to the data, SBI LIFE has the highest growth rate (27.33%), followed by MET LIFE (5.88%). When comparing negative growth rates, MAX NEW Insurance has the highest at -28.51 percent, followed by ICICI Insurance at -27.02.

V.   Suggestions

• In order to compete with private competitors, the LIC will need to implement novel changes to its operational models, business processes, channel management, and human resource strategy in order to rein in operating expenses and improve its combined ratios.
• It's certain that a certain share of new business will go to private life insurers now that they've entered the market. LIC's main priority right now is customer retention.
• To enhance their pace of expansion, insurance firms must offer a wider variety of goods to their clientele, such as pension plans, specialised group policies, and so on.
For the insurance company to expand, it must prioritise serving rural communities.
As a means of making insurance more useful and inexpensive, insurance firms should perform more in-depth market research before releasing insurance products aimed at specific demographic subsets.

VI. Conclusion

Life insurance firms can be traced back to India's pre-nationalization era. Following nationalisation, the Constitution of India formally established the Life Insurance Corporation of India. As a result of liberalisation, privatisation, and globalisation policies, Indian insurance firms have broadened their international reach. However, a great number of foreign insurers are now competing in the Indian market. Current trends show that private sector insurance growth has outpaced that of the public sector. The increased level of competition among them has been good for the consumer.

REFERENCES

[1]. Ade Ibiwoye (2010), ⁻Evaluating Financial Services Productivity: A comparison of Ratios, Index numbers and Frontier Methods" Journal of Economics and Engineering ISSN:2078-0346.
[2]. Anoop Rai (1996), "Cost Efficiency of International Insurance Firms" Journal of Financial Services Research, Vol. 10 pp. 213-233.
[3]. Cummins and Giusepp and Weiss (1996),"Productivity and Technical Efficiency in Italian Insurance Industry", The Wharton School, University of Pennsylvania, Working Paper Series 10, Presented at Georgia Productivity Seminar, pp. 1-41.
[4]. Cummins and Weiss (1998), "Analyzing Firm Performance in the Insurance Industry Using Frontier Efficiency Methods", The Wharton School, University of Pennsylvania, pp. 1-45.
[5]. David Cummins. J and Mary A. Weis (2010),"Systemic Risk and the Financial System"Federal Reserve Bank of New York Economic
[6]. Garg M.C. and Deepti (2008), "Efficiency of General Insurance Industry in India in the Post-Liberalization Era: A Data Envelopment Approach", The ICFAI Journal of Risk and Insurance, Vol.V, No. 1, pp. 32-49.
[7]. Gupta, S.P. (1987), "Statistical Methods", Sultanand Sons Publisher, New Delhi.
[8]. Hifza Malik (2011), "Determinants of Insurance Companies Profitability: An Analysis of Insurance Sector of Pakistan", Academic Research International, Vol 1, Issue 3, pp.315-322.
[9]. Hsiao & Su, 2006, "An Evaluation of Investment Performance and Financial Standing of Life insurers in Taiwan", The Journal of American Academy of Business, Vol.10
[10]. Jeng & Lai (2005), "Ownership structure, agency costs, specialization and efficiency: An analysis of Keiretsu and Independent insurers in the Japanese non life insurance industry" Journal of Risk and Insurance, Vol. 72 (1), pp.105- 158.
[11]. Kaman & Turgutlu (2009), "Cost Efficiency and Scale Economies in the Turkish Insurance Industry", Applied Economics, Vol.41, pp 3151-3159.
[12]. Karim, Mohd Zaini Abd Jhantasana, Chanta(2005), "Cost Efficiency and Profitability in Thailand's Life Insurance Industry: A Stochastic Cost Frontier approach", International Journal of Applied Econometrics and Quantitative Studies. Vol.2, pp.19-36.
[13]. Mariappan R (2011), "Growth and Productivity of the Unorganized Manufacturing, Sector in India" The Indian Journal of Industrial Relations,Vol.47, No.1, pp.20-35.
[14]. Marietta Janowicz-Lomot (2011) "Investment activity of non-life insurance companies in Poland" MIBES 2011 – Poste, pp.467-478.