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A COMPARATIVE ANALYSIS OF CAPITAL ADEQUACY OF BAJAJ ALLIANZ GENERAL INSURANCE CO. LTD. & ICICI LOMBARD GENERAL INSURANCE CO. LTD.

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ABSTRACT

Since inception the Indian Insurance industry passed through many hurdles and hindrances in order to attain the present status. However, the income earning capacity, eagerness and awareness of the general public are the key determinants of the growth of any insurance industry. In the Indian context, the insurance habits among the general public during the independence decade was rare but there was a remarkable improvement in the Indian insurance industry soon after the economic reform era (1991) due to healthy competition from many national as well as private insurance players. The present paper is an attempt to study the comparative analysis of Capital Adequacy Position of two major players in Indian Private Non-life insurance scenario i.e. Bajaj Allianz general insurance co.ltd and ICICI Lombard general insurance co. ltd in the light of changes mentioned above. The analysis has been done on the basis of their Capital Adequacy ratios and graphical analysis. At the last concluding remark has been given of the basis of test of significance. The study examines the financial soundness and put forward suggestions for enhancement.

***KEYWORDS**: Capital Adequacy Analysis, Standard Deviation and t-test.*

Introduction

Insurance is a means of protection from financial loss. It is a form of risk management primarily used to hedge against the risk of a contingent, uncertain loss. An entity which provides insurance is known as an insurer, insurance company, or insurance carrier. A person or entity who buys insurance is known as an insured or policyholder. The insurance transaction involves the insured assuming a guaranteed and known relatively small loss in the form of payment to the insurer in exchange for the insurer's promise to compensate the insured in the event of a covered loss. The loss may or may not be financial, but it must be reducible to financial terms, and must involve something in which the insured has an insurable interest established by ownership, possession, or preexisting relationship. The insurance sector has been divided into two:

- **Life Insurance:** Life Insurance is a contract providing for payment of a sum of money to the person assured or, following him to the person entitled to receive the same, on the happening of a certain event. It is a good method to protect your family financially, in case of death, by providing funds for the loss of income.
- **General Insurance:** Life Insurance is a contract providing for payment of a sum of money on the happening of the event insured. General Insurance can be fire insurance, accident insurance & marine insurance.

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Indian Insurance Industry

The insurance industry of India consists of 53 insurance companies of which 24 are in life insurance business and 29 are non-life insurers. Among the life insurers, Life Insurance Corporation (LIC) is the sole public sector company. Apart from that, among the non-life insurers there are six public sector insurers. In addition to these, there is sole national re-insurer, namely, General Insurance Corporation of India (GIC Re). Other stakeholders in Indian Insurance market include agents (individual and corporate), brokers, surveyors and third party administrators servicing health insurance claims. Out of 29 non-life insurance companies, five private sector insurers are registered to underwrite policies exclusively in health, personal accident and travel insurance segments. They are Star Health and Allied Insurance Company Ltd, Apollo Munich Health Insurance Company Ltd, Max Bupa Health Insurance Company Ltd, Religare Health Insurance Company Ltd and Cigna TTK Health Insurance Company Ltd. There are two more specialized insurers belonging to public sector, namely, Export Credit Guarantee Corporation of India for Credit Insurance and Agriculture Insurance Company Ltd for crop insurance.

Market Size

India's life insurance sector is the biggest in the world with about 360 million policies which are expected to increase at a compound annual growth rate (CAGR) of 12-15 per cent over the next five years. The insurance industry plans to hike penetration levels to five per cent by 2020.The country's insurance market is expected to quadruple in size over the next 10 years from its current size of US$ 60 billion.

Road Ahead

India's insurable population is anticipated to touch 750 million in 2020, with life expectancy reaching 74 years. Furthermore, life insurance is projected to comprise 35 per cent of total savings by the end of this decade, as against 26 per cent in 2009-10.The future looks promising for the life insurance industry with several changes in regulatory framework which will lead to further change in the way the industry conducts its business and engages with its customers. Demographic factors such as growing middle class, young insurable population and growing awareness of the need for protection and retirement planning will support the growth of Indian life insurance.

Top Players in private Non- life insurance sector:

- Bajaj Allianz General Insurance Co. Ltd.
- ICICI Lombard General Insurance Co. Ltd.
- IFFCO-Tokio General Insurance Co. Ltd.
- Reliance General Insurance Co. Ltd.
- Royal Sundaram Alliance Insurance Co. Ltd.
- TATA AIG General Insurance Co. Ltd.
- Cholamandalam General Insurance Co. Ltd.

Sample of the Study

We have selected as the sample of the study the top two private players of Non -Life insurance Sector:

- **ICICI Lombard General Insurance Company Ltd.:** Established in 2001, ICICI Lombard General Insurance Company is a joint venture between ICICI Bank- India's second largest bank and Fairfax Financial Holdings Limited- a financial services company based in Toronto. ICICI bank has 64% stake in the venture while Fairfax has 35% in the joint venture. ICICI Lombard General Insurance is the largest private sector general insurance company in India.
- **Bajaj Allianz General Insurance Company Ltd.:** It is a joint venture between Bajaj Finserv Limited (recently demerged from Bajaj Auto Limited) and Allianz SE. Both enjoy a reputation of expertise, stability and strength. Bajaj Allianz received the Insurance Regulatory and Development Authority (IRDA) certificate of Registration on 2nd May, 2001 to conduct various businesses (including Health Insurance business) in India. The Company has an authorized and paid up capital of Rs. 110 crores. Bajaj Finserv Limited holds 74% and the remaining 26% is held by Allianz, SE. As on 31st March 2016, Bajaj Allianz continues to be one of the most financially robust insurers in the industry by maintaining its growth as well as profitability.

Objective of the Study

To find out the comparative Capital Adequacy position of Bajaj Allianz General Insurance Co. Ltd. and ICICI Lombard General Insurance Co. Ltd.

Hypothesis

Ho: There is no significant difference between the Capital Adequacy position of Bajaj Allianz General Insurance Co. Ltd. and ICICI Lombard General Insurance Co. Ltd.

Ha: There is significant difference between the Capital Adequacy position of Bajaj Allianz General Insurance Co. Ltd and ICICI Lombard General Insurance Co. Ltd.

Research Methodology

This study is done with special reference to the two most preferred and trusted Indian private sector non-life insurance companies they are Bajaj Allianz general insurance co.ltd and ICICI Lombard general insurance co*. ltd.* For this purpose exploratory method has been adopted as it helps to investigate any problem with suitable hypothesis and it is also important for the clarification of the concept. The study is based on secondary data and the comparison has been made on the Capital Adequacy position of both the companies.

Research Tool

In this study, for interpreting the results modern financial analysis have been carried out which minutely evaluates and examine relevant components for companies Capital Adequacy which can be viewed as the key indicator of an insurer's financial soundness. Capital is seen as a cushion to protect insured and promote the stability and efficiency of financial system, it also indicates whether the insurance company has enough capital to absorb losses arising from claims. For the purpose of calculation of capital adequacy of companies is important. Under study, two ratios have been used, prescribed by IMF and World Bank (IMF, 2005). (i) The ratio of Net Premium to Capital and (ii) The ratio of Capital to Total Assets The research tool applied to prove the assumption is the test of significance. After judicious evaluation of all performance parameters companies are ranked according to their performance. The outcome of the study depends on the selected period by the researchers which may differ from other analysis.

Data Collection

The researcher has collected information from various internet sources, published reports, magazines, annual reports and the websites of the companies. The study examines the financial statements Revenue Account, Profit and Loss Account and Balance Sheet of last Ten years of the respective corporations i.e. from 2005-15.

Review of Literature

A Study conducted by **Ravi Parkas, S., Satyanarayana Chary, T. and Shyamsunder, C. (2003)** article "Globalization - It's Impact on Insurance Industry" Indian journal of marketing revealed that the size of the existing insurance market is very large. It is also growing at the rate of 10% per year. The estimated potentiality of the Indian insurance market in terms of premium is around $80 billion in 1999 only.

Krishnamurthy, S. (2005) in his article entitled insurance sector challenges of competition and future scenario concludes that the limited availability of data on policyholders, the low awareness among policyholders the inadequate infrastructure and technology are the major problems of the insurance industry in marketing its products.

Namasivayam, Ganesan, S. and Rajendran, S. (2006) examined the socioeconomic factors that are sponsible for purchase of life insurance policies and the preference of the policyholders towards various types of policies of Company. From the analysis, it was found that factors such as age, educational level and sex of the policyholders are insignificant, but income level, occupation and family size are significant factors for the purchase of LIC products.

A study conducted by **Rajesham, Ch. and Rajender, K. (2006)** article "Changing Scenario of Insurance Sector" Indian Journal of marketing revealed that insurance companies of India are required to come up with multi-benefit policies including tax benefits with quality based timely customer services and need to focus on health insurance which is one of the untapped areas of insurance including services through innovative products, smart marketing and aggressive distribution with internet facility with much individual attention transparency and flexibility to increase the quality and volume of insurance business. Today, the focus is on selling more products to existing customers to improve profitability, therefore customer–focused strategies require an effective CRM ensuring insurance firms monitor the ebb and flow of customer behavior, giving them a holistic 360-degree view for their customers.

A study conducted by **Raman, N. and Gayathri, C. (2006)** article “A Study on Customer's Awareness towards New Insurance Companies”, Indian journal of Marketing revealed that customers are now looking at insurance as complete financial solutions offering stable returns coupled with total protection. Companies will need to constantly innovate in terms of product development to meet over changing consumer needs. Understanding the customer better will enable insurance companies to design appropriate products, determine price correctly and increase profitability. In the present scenario a key differentiated would be professional customer service in terms of quality of advice on enhancing the customer convenience.

A study conducted by **Bodla, B.S. and Sushma Rani Verma (2007)** article “Life Insurance Policies in Rural Area and Understanding Buyer Behavior”, ICFAI University revealed that insurance sector plays a very important role in the development of any economy and it provides long-term funds for infrastructure Development and at the same time strengthens the risk taking ability.

A study conducted by **Tanmay Chary, Harshita Mishra and Venkataseshaiah, S. (2007)** article “Customer Preferences in Insurance Industry in India”.

Patil, P.B. and Thakkar, P.N. (2007) article “Impact of Disinvestment on Banking and Insurance Sector” revealed that a strong competition among the insurance companies has led to better services being provided by customer satisfaction can be known from the customer retention ratio. Now most of the companies are customer centric approach, rather than product centric approach which is leading to customer-retention ratio.

Selvavinayagam, K. and Mathivanan, R. (2010) article has revealed that the competitive climate in the Indian insurance market has changed dramatically over the last few years. At the same time, changes have been taking place in the government regulations and technology. The expectations of policyholders are also changing. The existing insurance companies have to introduce many new products in the market, which have competitive advantage over the products of life insurance companies.

Financial Soundness

- **Capital Adequacy**

Capital Adequacy is viewed as the key indicator of an insurer's financial soundness and prudential standards recognize the importance of adequate capitalization with solvency as key focus area of insurance supervision. However, unfortunately there are no internationally accepted standards for capital adequacy of insurance companies. The greater risk to the financial stability of an insurer stems from underwriting business that is either too great in volume or too volatile for its capital base or otherwise whose ultimate result is too difficult to determine. Analysis of capital adequacy depends critically on realistic valuation of both assets and liabilities of the insurance companies. Capital is seen as a cushion to protect insured and promote the stability and efficiency of financial system, it also indicates whether the insurance company has enough capital to absorb losses arising from claims. Although insurance regulator has not prescribed any norm to maintain the minimum capital adequacy ratio as RBI has prescribed to maintain it to a minimum of 8 percent in banking sector, instead regulator has asked insurance companies to maintain solvency margin of 1.5 i.e. excess of assets over liabilities, monitored now on quarterly basis, moreover IRDA issues registration to those companies only having capital base of minimum of Rs. 100 crores. For the capital adequacy analysis of the insurers two capital adequacy ratios have been used in present study i.e. Net Premium to Shareholder's Fund and Shareholder's Fund to Total Assets ratio. The former reflects the risk arising from underwriting operations and the latter reflects assets risk. Net premium is a convenient proxy for the quantum of retained indemnity risk, that is, risk the insurer retains after reinsurance, being the risks that must be covered by own capital. Due to absence of international norm, capital is defined as total equity capital plus reserves.

T-Test

The t test (also called Student's T Test) compares two averages (means) and tells if they are different from each other. The t test also tells you how significant the differences are; In other words it lets you know if those differences could have happened by chance. The following formula to calculate the t-score:

$$t = \frac{(\Sigma D)/N}{\sqrt{\frac{\Sigma D^2 - \left(\frac{(\Sigma D)^2}{N}\right)}{(N-1)(N)}}}$$

ΣD: Sum of the differences (Sum of X-Y)

ΣD2: Sum of the squared differences

(ΣD) 2: Sum of the differences, squared.

Compare your t-table value from to your calculated t-value. The calculated t-value is greater than the table value at an alpha level of .05. The p-value is less than the alpha level: p <.05. We can reject the null hypothesis that there is a difference between means.

Data Analysis:

Net Premium and Shareholder's Fund of Selected Private Sector Non-Life Insurance Companies of India (Period from 2005-06 to 2014-15) (Rs. In Lacs)

Year	Bajaj Allianz		ICICI Lombard	
	Premium	Fund	Premium	Fund
2005-06	58637	26707	52768	37292
2006-07	83853	40341	106665	79271
2007-08	141544	57732	156718	107596
2008-09	189127	67247	197365	160265
2009-10	188420	69330	219282	167312
2010-11	214965	83657	285616	153083
2011-12	247468	86023	354900	185673
2012-13	292433	125531	400925	185866
2013-14	349305	166429	435291	238109
2014-15	383190	222548	423533	282332

Source: Annual Report of Accounts of respective companies from IRDA

Ratio of Net Premium and Shareholder's Fund of Selected Private Sector Non-Life Insurance Companies of India (Period from 2005-06 to 2014-15) (In Percentage)

Year	Bajaj Allianz	ICICI Lombard
	Pre/Fund Ratio	Pre/Fund Ratio
2005-06	219.56	141.50
2006-07	207.86	134.56
2007-08	245.17	145.65
2008-09	281.24	123.15
2009-10	271.77	131.06
2010-11	256.96	186.58
2011-12	287.68	191.14
2012-13	232.96	215.71
2013-14	209.88	182.81
2014-15	172.18	150.01

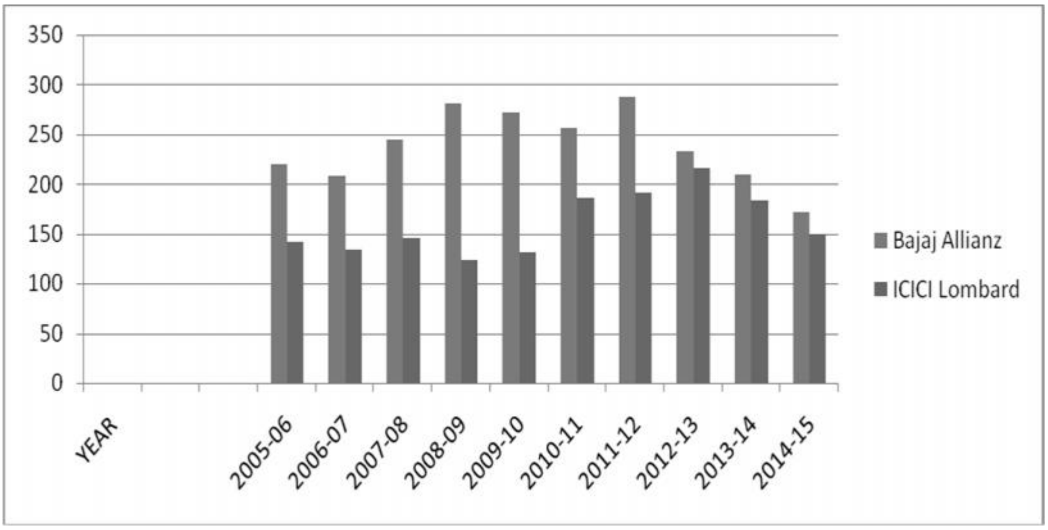
Ratio of Net Premium / shareholder's fund *100
Shareholder's fund = Equity share capital + Reserve & Surplus

Analysis for calculated Ratio's for Selected Private Sector Non-life Insurance Companies

The ratio of net premium to the shareholder's Fund, witnessed for Bajaj Allianz General Insurance Company Limited fluctuating trend in the ratio ranging between 207.86 and 287.68 percentages but has decreased to 172.18 in 2014-15. While ICICI Lombard General Insurance Company Limited also shows fluctuation trend in ratio ranging between 123.15 and 215.71% during the research period. This indicates that the business of all the selected private sector companies was also supported by the fair amount of capital for all the private insurers.

Graphical Analysis

Graphs for Ratio of Net Premium and Shareholder's Fund of Selected Private Sector Non-Life Insurance Companies of India



Statistical Analysis

T-Test for Ratio of Net Premium and Shareholder's Fund of Selected Private Sector Non-Life Insurance Companies of India

	Bajaj Allianz	ICICI Lombard
Mean	238.5265	160.2171
Variance	1364.764	976.6449
Observations	10	10
Hypothesized Mean Difference	0	
df	18	
t Stat	5.117706	
P(T<=t) one-tail	0.000036	
t Critical one-tail	1.734064	
P(T<=t) two-tail	0.000072	
t Critical two-tail	2.100922	

In the analysis, an alpha of **0.05** is used as the cutoff for **significance**. If the **p**-value is less than **0.05**, we reject the null hypothesis that there's no difference between the means and conclude that a **significant** difference does exist. In the above analysis the t-value is 5.11759. The p-value is .000072. The result is significant at p <.05..Hence Null Hypothesis is rejected and Alternative Hypothesis is accepted that **there is significant difference between the** capital adequacy position of Bajaj Allianz general insurance co.Ltd. and ICICI Lombard general insurance co. Ltd.

Shareholder's Fund /Total Assets

Shareholder's Fund and Total Assets of Selected Private Sector Non-Life Insurance Companies of India (Period from 2005-06 to 2014-15) (Rs. In Lacs)

Year	Bajaj Allianz		ICICI Lombard	
	Fund	Assets	Fund	Assets
2005-06	26707	106329	37292	163909
2006-07	40341	169607	79271	295405
2007-08	57732	255270	107596	379419
2008-09	67247	316703	160265	548421

2009-10	69330	373242	167312	668627
2010-11	83657	444656	153083	822870
2011-12	86023	537899	185673	1052516
2012-13	125531	653725	185866	1186870
2013-14	166429	777376	238109	1354488
2014-15	222548	890185	282332	1365639

Source: Annual Report of Accounts of respective companies from IRDA

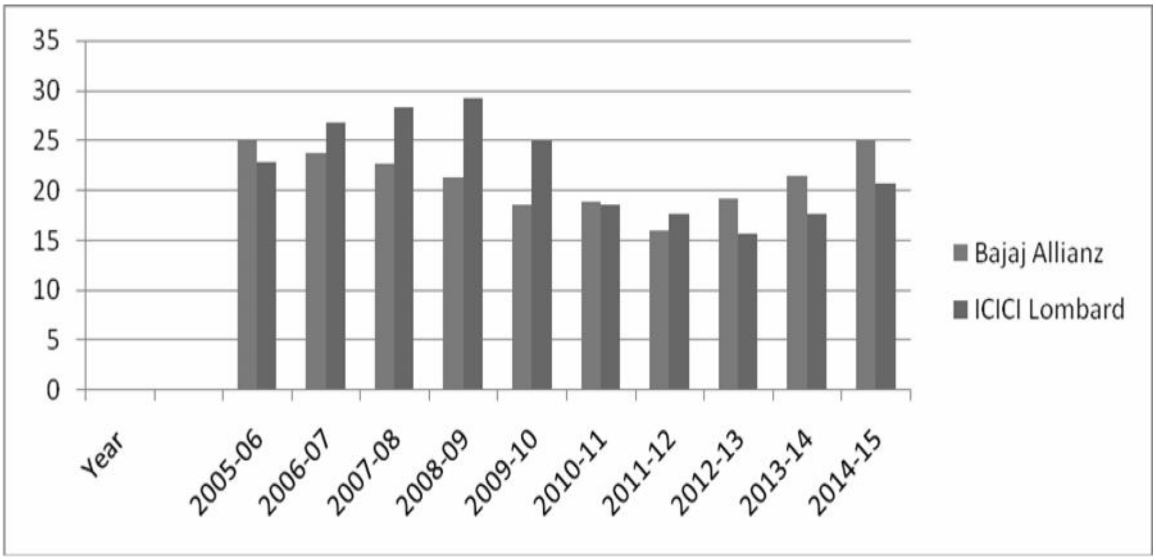
Ratio of Shareholder's Fund and Total Assets of Selected Private Sector Non-Life Insurance Companies of India (Period from 2005-06 to 2014-15) (Rs. In Lacs)

Year	Bajaj Allianz	ICICI Lombard
	FUND/ASSET Ratio	FUND/ASSET Ratio
2005-06	25.12	22.75
2006-07	23.78	26.83
2007-08	22.62	28.36
2008-09	21.23	29.22
2009-10	18.58	25.02
2010-11	18.81	18.60
2011-12	15.99	17.64
2012-13	19.20	15.66
2013-14	21.41	17.58
2014-15	25.00	20.67

Ratio = shareholder's fund / Total Assets *100
Shareholder's fund = Equity share capital + Reserve & Surplus
Total Assets = All Assets excluding fictitious Assets

The ratio of shareholder's fund to Total Assets, witnessed for Bajaj Allianz General Insurance Company Limited fluctuating trend in the ratio ranging between 15.99 and 25.12 percentages. Whereas ICICI Lombard General Insurance Company Limited also shows fluctuation trend in the ratio ranging between 17.64 and 29.22 percentage during the research period. Bajaj Allianz shows a high ratio in the research period as compared to ICICI Lombard. As the lower ratio indicates the greater asset base of the company while a higher ratio indicate the total reliance on Shareholder's Fund.

Graphical Analysis



Statistical Analysis

T-Test for Ratio of Shareholder's Fund and Total Assets Selected Private Sector Non-Life Insurance Companies of India

	Bajaj Allianz	ICICI Lombard
Mean	21.17449	22.23485
Variance	9.133976	24.12853
Observations	10	10
Hypothesized Mean Difference	0	
df	15	
t Stat	-0.5814	
P(T<=t) one-tail	0.284802	
t Critical one-tail	1.75305	
P(T<=t) two-tail	0.569604	
t Critical two-tail	2.13145	

In the analysis, an alpha of **0.05** is used as the cutoff for **significance**. If the **p**-value is less than **0.05**, we reject the null hypothesis that there's no difference between the means and conclude that a **significant** difference does exist. In the above analysis the t-value is -0.58066. The p-value is .568667. The result is not significant at $p < .05$..Hence Null Hypothesis is accepted that **there is no significant difference between the** capital adequacy position of Bajaj Allianz general insurance co.ltd and ICICI Lombard general insurance co*. ltd.*

Conclusion

Bajaj Allianz General Insurance has performed better as per both capital adequacy norms as compared to ICICI Lombard in the research period. Net Premium to Shareholder's Fund reflects the risk arising from underwriting operations. Net premium is a convenient proxy for the quantum of retained indemnity risk, that is, risk the insurer retains after reinsurance. The higher capital adequacy ratio is considered as good, although no benchmark has been prescribed by IRDA, however, to ensure safety against insolvency, high capital adequacy ratio is desirable. This indicates that the business of Bajaj Allianz General Insurance was supported by the fair amount of capital for all the private insurers. The ratio of Shareholder's Fund to total assets indicates the proportion of Shareholder's Fund in the total asset portfolio of the companies, growth in the assets of the business and how efficiently the Shareholder's Fund has been invested to create assets. Lower ratio may be preferred at higher one, as higher ratio indicates total reliance on Shareholder's Fund where as a lower ratio indicate the greater asset base of the company. Shareholder's Fund to total assets reflects assets risk.

References

- C. M. Chaudhary (1999), Research Methodology, RSBA Publishers, Jaipur.
- D.D.Sharma, Marketing Research- Principles, Applications And Cases, Sultan Chand And Sons, New Delhi.
- I.M.Pandey, Financial Management, Eighth Edition, Vikas Publishing House Pvt. Ltd., New Delhi, P.P. 108 to 179.
- IRDA Annual Reports, "Insurance Regulatory and Development Authority.
- M. N. Mishra & S. B. Mishra (2007) "Insurance Principles and Practice",
- R.M.Shrivastva,(2000) Essentials of Business Finance, Himalaya Publishing House, Seventh Revised Edition.
- S.Chand & Company Ltd, New Delhi.
- www.irdaindia.org
- https://www.icicilombard.com
- https://www.bajajallianz.com

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