

## Financial Resilience of India's Private Life Insurance Sector: A CAMEL-Based Assessment

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**ABSTRACT:** This research paper presents a comparative study of selected private life insurance companies in India using the CAMEL model. Tawheed B. (2016) The macro-level analysis of the performance of the Life Insurance Corporation (LIC) in India provides valuable insights into its operational efficiency and societal impact. The study focuses on HDFC Life Insurance, ICICI Prudential Life Insurance, SBI Life Insurance, and Max Life Insurance, representing a significant portion of the private life insurance market. The CAMEL model, which encompasses Capital Adequacy, Asset Quality, Risk Management, Earnings, Market Perception, and Liquidity, serves as a comprehensive framework for evaluating the financial health and performance of these insurance companies. Trivedi S. (2016) The study on risk management tools and techniques in life insurance in India aims to provide valuable insights into developing effective tools for life insurers to analyze customer risks. This research endeavors to conduct a comparative study of three leading private life insurance companies in India: HDFC Life Insurance, ICICI Prudential Life Insurance, and SBI Life Insurance. The findings indicate that HDFC Life Insurance exhibits superior Capital Adequacy, positioning it favorably in terms of protecting policyholders and promoting financial system stability. Max Life Insurance demonstrates better Asset Quality, reflecting its strong financial health and risk management capabilities. All the selected companies show effective risk management practices, which contribute to their financial stability and resilience. SBI Life Insurance is a top performer in Management Soundness, Earnings and Profitability, and Liquidity ratios, highlighting its operational efficiency, profitability, and financial resilience. Madhuri T. and Rao N. (2020) has evaluated the financial performance of selected Indian life insurance companies using the CAMEL model. Recommendations of the paper suggested LIC's capital position and underwriting expenses while urging private insurers to enhance liquidity for timely liability fulfillment. The study provides valuable insights for regulators, investors, and other stakeholders, supporting informed decision-making and promoting overall stability and sustainability in the insurance industry.

**Keywords:** Private Life Insurance, CAMEL Model, Financial Health, Risk Management, Profitability

### I. INTRODUCTION

Jain R. (2018) underscores the importance of customer satisfaction in shaping the perception and success of life insurance providers like LIC. The private life insurance sector in India has emerged as a crucial player in the country's financial landscape, providing financial security to individuals and contributing significantly to economic growth. Habeeb M., Kumar A., Gupta R. (2016) highlights the importance of understanding and addressing these barriers to enhance the reach and effectiveness of life insurance offerings in the Indian market. The selected companies represent a diverse cross-section of the market, each with its unique strengths and market positioning. Jain R. (2018) underscores the importance of customer satisfaction in shaping the perception and success of life insurance providers like LIC.

The study employs the CAMEL (Capital Adequacy, Asset Quality, Risk Management, Earnings, Market Perception, and Liquidity) model as a comprehensive evaluation framework to assess the financial health and performance of the chosen insurance companies. This model allows for a nuanced analysis, enabling stakeholders to make informed decisions. Patel A. and Dr. Dwivedi V. (2022) study evaluates the profitability and long-term viability of selected private life insurance companies in India, namely HDFC Life, ICICI Prudential Life, and SBI Life. Concerning long-term viability, SBI Life demonstrates stronger asset management strategies compared to HDFC Life and ICICI Prudential Life, as evidenced by proprietary ratios and liabilities-to-assets ratios.

Roy R. and DR. Adhikari K. (2021), comparative study scrutinizes the financial performance of ICICI Prudential Life Insurance Company and IDBI Federal Life Insurance Company, with a focus on profitability, liquidity, and solvency. Chandrapal J. (2017) The aim is to assess the financial stability of Indian life insurers, including LIC of

India and Private Life Insurance Companies (PLIC), using ratio analysis within the CAMEL framework. The indicators of financial soundness reflect significant growth in the Indian life insurance sector.

The research aims to address critical objectives, including the assessment of capital adequacy, asset quality, risk management practices, earnings, market perception, and liquidity positions of the selected entities. The outcomes of this study are anticipated to contribute to both academic literature and the informed decision-making processes of investors, policyholders, regulators, and the companies themselves.

#### •CAMEL MODEL

The CAMEL model offers a structured approach to assess the financial health and performance of insurance companies. The acronym stands for Capital Adequacy, Asset Quality, Reinsurance and Actuarial Issues, Management Soundness, Earnings and Profitability, and Liquidity. This comprehensive framework is designed to address the intricate aspects of the insurance industry and evaluate crucial indicators for sustainable operations and trust among stakeholders. Parida B. (2022) has investigated Private companies face substantial stock market risks but excel in capital adequacy and premium utilization efficiency.

1. Capital Adequacy:
2. Asset Quality:
3. Reinsurance and Actuarial Issues:
4. Management Soundness:
5. Earnings and Profitability:
6. Liquidity:

The CAMEL model offers a comprehensive and structured approach for evaluating the financial health and performance of insurance firms. By thoroughly examining capital adequacy, asset quality, risk management, earnings, market perception, and liquidity, the model provides essential insights that are invaluable for regulators, investors, and other stakeholders. This holistic assessment supports informed decision-making and promotes overall stability and sustainability in the insurance industry. The CAMEL framework serves as a robust analytical tool, enabling a nuanced understanding of the financial pillars underpinning the operations of insurance companies and guiding strategic decisions that contribute to the long-term growth and resilience of the sector. Dr. Basu S. and Banerjee A. (2022) has investigated the earning, profitability, and efficiency of public and private life insurance companies in India. Findings reveal. Privatization is noted to impact the Indian financial system, aligning with prior research. Despite statistical differences, the DEA efficiency measurement places LIC at the forefront, emphasizing its superior efficiency and top composite ranking among all life insurance companies. Dadhich M. (2016) The analysis attempted to examine the investment portfolios of various life insurance companies, focusing on their adherence to prevailing investment guidelines and highlighting any deviations from these norms.

Babu M. (2015) The analysis and examination of both private and public sector insurance companies reveal that public insurers must enhance their competitiveness by improving efficiency, innovation, and cost-effectiveness.

Sharma D. and Dr. Sarkar S. (2023) The research delves into the financial performance of private sector life insurance companies in India during the first two decades of the 21st century, addressing a gap in existing literature. The study aims to evaluate the companies' financial performance over time and determine whether improvements occurred from the first to the second decade.

To study LIC sector in detail researcher focus on private sector. the list of private sectors is added in the annexure. from that list top four companies selected for CARAMAL model. As well as the list of ratios utilised for the model is attached in the enclosure.

1. HDFC Life Insurance
2. ICICI prudential life Insurance
3. SBI Life Insurance
4. Max Life Insurance

## II. RELATED WORK

Sharma U. (2022) This research endeavors to perform a comparative analysis of selected private life insurance companies in India, aiming to assess their growth, profitability, productivity, and stakeholder perception. Singh A. and Fatima S. (2017) The performance appraisal of ICICI Prudential Life Insurance Company indicates its success in earning a reputable name and securing a significant market share in the life insurance industry. Dr. Ahmed R. and Dr. Sarkar S. (2019) The study assessed the financial stability of life insurance firms in Bangladesh using CAMELS and MDA analysis. Charumathi B. (2012) The study on the determinants of profitability of Indian life insurers offers valuable insights into the factors shaping the financial performance of this sector. Harwani D. (2021) The study analyzed the financial performance of selected public sector non-life insurance companies in India using the CAMEL model over a five-year period from 2014-15 to 2018-19. Results indicated a downward trend across various financial ratios, with a focus on asset base over equity base. Among the companies studied, National Insurance Co. Ltd. demonstrated relatively better performance in terms of management soundness.

Dar S. and Thaku I. (2015) The study aims to analyze the financial performance of selected public and private non-life insurers in India and conduct a comparative statistical analysis. Using a set of ratios and three parameters from the CAMEL model. The findings suggest that private insurers exhibit lower mean ratios and higher variability compared to public insurers, indicating potentially higher underwriting efficiency. The study recommends that non-life insurers monitor their expense ratios to safeguard solvency and maintain a comfortable liquidity level. Naidu K. and Dr. Paramasivan C. (2015) The study aimed to analyze the financial performance of selected public and private life insurance companies in India. However, private insurers had a higher lapsation ratio, while LIC demonstrated better servicing of death claims compared to private life insurers.

Vasavi V. and Reddy M. (2020) the study suggested that ICICI Life needs to adopt immediate corrective measures to arrest the downfall in the investment income ratio, while SBI Life should review its investment policy and portfolio to be a tough competitor for ICICI Life.

Chakraborty J. and Dr. Sengupta P. (2015) the study emphasized the significant scope for further research in this area, advocating for more comprehensive studies involving additional players and spanning longer periods to gain a clearer understanding of the functioning and performance of the Indian life insurance sector.

Smajla N. (2020) The CAMELS model is utilized to gauge the financial stability of insurance companies, encompassing indicators for capital adequacy, asset quality, reinsurance and actuarial issues, management soundness, earnings and profitability, liquidity, and sensitivity to market risks.

Prof. Ansari V. and Mr. Fola W. (2014) The study aimed to assess the financial soundness and performance of life insurance companies in India using the CAMEL model parameters. The study recommended that the insurance regulatory authority of India should prioritize attention to capital adequacy, liquidity indicators, and management soundness of insurance companies, as these factors significantly contribute to the overall financial soundness of the sector.

Rohilla R. (2023) The study aimed to assess the financial soundness and performance of life insurers in India using the CAMEL model parameters. It found that the life insurance penetration ratio and insurance density have been increasing, indicating growth in the economy and domestic savings.

Dr. Husain S. (2022) Several studies have delved into the financial performance of life insurance companies in India. One study aimed to analyze and compare the profitability of public and private life insurance companies over a five-year period from 2016 to 2020.

Mr. Bodla S., Dr. Tandon D. and Dr. Bodla B. (2017) The study aimed to analyze the profitability performance of private sector life insurance companies and compare it with public sector life insurance companies in India. It concluded that many life insurers in India need to enhance their underwriting income for sustainable development and should manage expense ratios and other outflows to achieve profitability.

Surya M. and Dr. Sudha B. (2020) The CAMEL model serves as a framework for assessing the financial soundness of insurance companies, particularly within the insurance sector. It comprises multiple categories, including Capital Adequacy, Asset Quality, Risk Management, Management Soundness, Earnings and Profitability, and Liquidity.

Ghimire R. and Dr. Kumar P. (2014) The research paper aimed to analyze and compare the financial performance of life insurance companies in India using the CAMELS framework. Recommendations included

advocating for life insurers in India to prioritize aspects such as size, underwriting risk, volume of capital, and leverage to enhance financial performance.

Dr. Rani B. and Sharma R. (2020) The financial performance of Indian life insurance companies has exhibited diverse trends over time. A study employing the CAMEL model revealed a positive correlation between CAMEL indicators and the profitability of Life Insurance Corporation of India (LIC). These studies underscore the utility of the CAMEL model in assessing the financial performance of life insurance companies in both India and Nepal.

Tomar P. and Sainy M. (2017) The financial performance of Indian life insurance companies has been subject to various trends and indicators over time. Numerous studies have aimed to evaluate the financial soundness and profitability of both public and private sector insurance companies in India. Moreover, these studies have underscored the necessity for further research to compare the financial soundness of different insurance companies and to assess the impact of various financial indicators on their profitability.

An anomaly was observed in Max Life's liquidity ratio (2109.36% in 2021). This unusually high value likely reflects an extraordinary increase in liquid assets or a temporary drop in short-term liabilities during that fiscal year. Such discrepancies should be explored further through detailed financial disclosures or management commentary to ensure accurate interpretation.

Mathew D. and Dr. Edward J. (2021) The study examined the financial soundness of 15 life insurance companies in India using the CAMELS framework from 2015-2016 to 2019-2020. It found that private life insurance companies exhibited a higher solvency margin compared to the government-owned Life Insurance Corporation of India. Dr. Parthiban V. (2021) The study assessed the financial position and performance of selected life insurance companies in India using the CAMEL model from 2008-09 to 2012-13. The study highlighted weaknesses in the sector, pointing to an excessive focus on marketing divisions to increase premiums without a proportionate investment in risk management of investment portfolios. This underscores the need for a balanced approach to ensure long-term financial sustainability in the Indian life insurance sector. Chakraborty J. and Sengupta P. (2016) the study conducted analyses on solvency and market concentration for the same period. Findings revealed LIC's continued dominance in the market, despite the privatization efforts initiated more than a decade prior. Sinha A. (2013), this research contributes significantly to the understanding of financial soundness within the Indian insurance sector, offering insights into the unique challenges and opportunities facing leading insurers.

Dr. Mathur H. (2023) The study on profitability analysis of HDFC Life Insurance and ICICI Pru Life Insurance offers valuable insights into the financial performance of these key players in the Indian insurance sector.

Patel K. and Patel P. (2021) The study on profitability analysis of HDFC Life Insurance and ICICI Pru Life Insurance offers valuable insights into the financial performance of these key players in the Indian insurance sector.

Patel N. (2020) The comparative study of financial performance between LIC and ICICI Prudential Insurance represents a valuable endeavor in assessing the health and viability of two prominent players in the Indian insurance industry. Chandrapal J. (2019) The examination of the impact of liberalization on the Indian life insurance industry represents a crucial endeavor in understanding the dynamics and evolution of the sector following significant policy changes.

Kumar V. and Sinha N. (2019) The examination of post-purchase experiences of customers in life insurance policies represents a crucial aspect in understanding consumer behavior and satisfaction levels within the insurance sector.

Johri G. (2020) The evaluation of the financial performance of the Life Insurance Corporation of India (LIC) within the Indian financial market is a critical aspect in understanding its standing and impact. This study, conducted over a period of 10 years from 2010 to 2019, utilized secondary data analysis and employed tools such as ratio analysis and compounded annual growth rate (CAGR) to assess LIC's financial performance.

Bedi H. and Singh P. (2011) The empirical analysis of the life insurance industry in India, focusing on the transition from the pre- to post-economic reform era, offers valuable insights into the sector's evolution. Utilizing statistical tools such as t-tests and Anova, the study delves into the overall performance of the industry.

Rakesh H. and Shipa R. (2015) The study of the financial performance of the Life Insurance Corporation of India (LIC) provides valuable insights into one of the largest insurance entities in the country. By examining data spanning nine years from 2005-06 to 2013-14, the research aims to uncover trends and patterns in LIC's financial and operating performance.

Gour A. and Gupta A. (2012) The study focused on determining the solvency ratios of Indian life insurance companies over a three-year period from 2009-10 to 2011-12. It aimed to analyze whether the performance of different companies was similar or if there were significant differences.

Supriya (2018) The evaluation of financial performance among life insurers in India presents a crucial analysis, especially in the context of dynamic market trends and regulatory changes. By examining a sample of six Indian life insurers over a six-year period, this study sheds light on the evolving landscape of the insurance industry.

Neelaveni (2012) the study concluded that the Life Insurance Corporation (LIC), being a public sector entity, experienced challenges due to competition from private insurers. In contrast, private life insurance companies performed well, especially in terms of financial aspects.

Irem H. and Bashir A. (2019) The investigation into the determinants of profitability among Indian life insurance companies sheds light on the key factors influencing their financial performance.

Talla N. (2017) The comparative study examining the effects of claim settlement practices on the operating efficiency and profitability of life insurance companies in India provides valuable insights into the industry's dynamics.

Kumari (2013) The analysis focused on evaluating the financial performance of both public and private life insurance industries. Various parameters were considered, including the number of life insurance companies, private sector offices, insurance penetration and density, growth in premium income, and the size of the insurance market.

Habeeb M., Kumar A. , Tawheed B. (2016) The macro-level analysis of the performance of the Life Insurance Corporation (LIC) in India provides valuable insights into its operational efficiency and societal impact. Gupta R. (2016) highlights the importance of understanding and addressing these barriers to enhance the reach and effectiveness of life insurance offerings in the Indian market. Trivedi S. (2016) The study on risk management tools and techniques in life insurance in India aims to provide valuable insights into developing effective tools for life insurers to analyze customer risks.

In addition to ratio analysis, inferential statistical methods such as trend analysis, ANOVA, and regression could be applied to verify the significance of inter-company differences and time-based variations. This would enhance the robustness of findings and support empirical validation of the CARMEL-based results.

### III. MATERIAL AND METHOD

#### 1. DATA COLLECTION

- To evaluate the financial soundness and performance of selected private life insurers in India on the basis CARMEL Model parameters.
- To make comparative statistical analysis of the financial soundness and performance for the selected private life insurance companies.
- To scan the insurance regulatory and supervisory benchmarks in light of CARMEL parameters.

#### 2. RESEARCH DESIGN

Research Design:- Research design is descriptive research.

Nature of Study: - Nature of study is quantitative data. As all the data that has been collected are measurable in number.

Type of Research: -Research of this report is based on Secondary data. As data is collected from the different-different sources.

Data Collection: - Secondary research is used in this research and past five years data is collected from 2019 – 2023.

### IV. DATA ANALYSIS

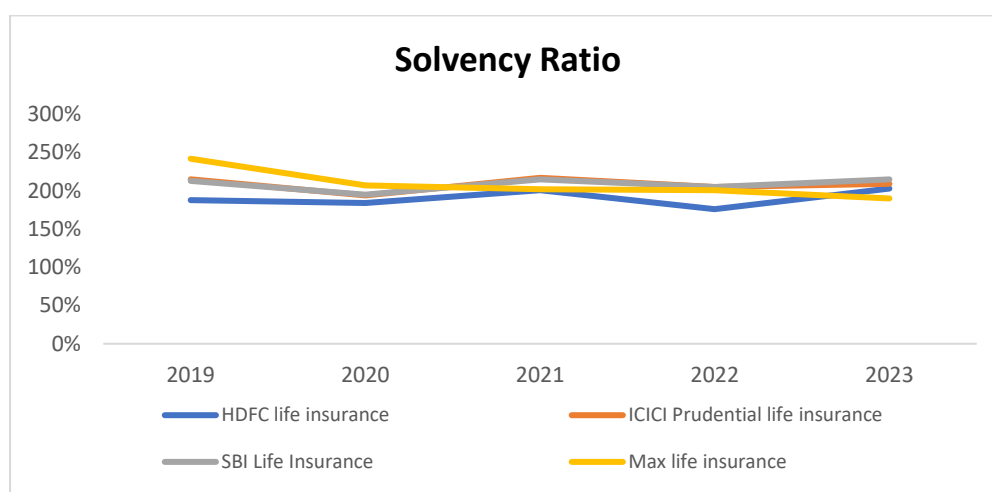
#### 1. QUANTITATIVE DATA ANALYSIS

The following data discuss related to CARAMAL model with utilisation of different ratios.

**Capital Adequacy**

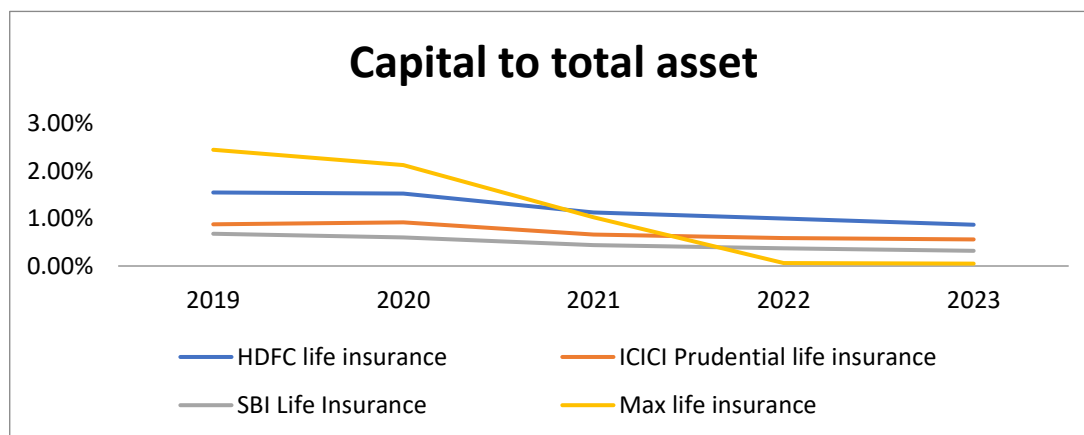
**Table : I Solvency ratio:**

Year	HDFC life insurance	ICICI Prudential life insurance	SBI Life Insurance	Max life insurance
2019	188%	215%	213%	242%
2020	184%	194%	195%	207%
2021	201%	217%	215%	202%
2022	176%	205%	205%	201%
2023	203%	209%	215%	190%



**Table :II Capital to total asset:**

Year	HDFC insurance life	ICICI Prudential life insurance	SBI Life Insurance	Max life insurance
2019	1.55%	0.88%	0.68%	2.45%
2020	1.53%	0.92%	0.60%	2.13%
2021	1.13%	0.66%	0.44%	1.03%
2022	1.00%	0.59%	0.37%	0.06%
2023	0.87%	0.56%	0.32%	0.05%

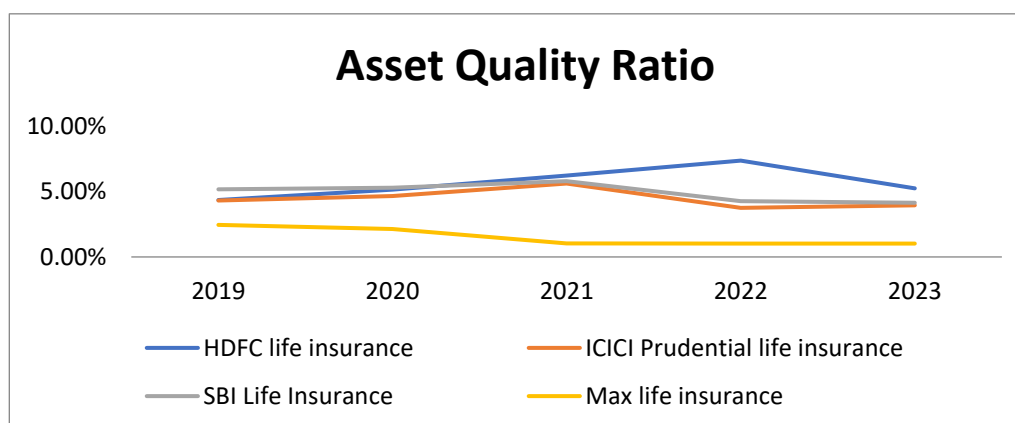


From the Table it shows that capital adequacy position of selected life insurers in India during the period of study. Capital is considered to protect insured and promote the soundness of financial system; it also indicates whether the insurer has enough capital to absorb losses arising from claims. The solvency ratio of each private company is looking good and showing the same whereas in the Capital to asset ratio HDFC is at the better position than others. The Max life insurance stood at last with 0.05% only. So here we can say HDFC Life Insurance is in better position.

## 2. Asset Quality Ratio

**Table : III Asset quality ratio:**

Year	HDFC insurance life	ICICI Prudential life insurance	SBI Life Insurance	Max life insurance
2019	4.35%	4.32%	5.16%	2.45%
2020	5.14%	4.66%	5.28%	2.13%
2021	6.23%	5.61%	5.79%	1.03%
2022	7.36%	3.75%	4.25%	1.02%
2023	5.24%	3.94%	4.14%	1.02%

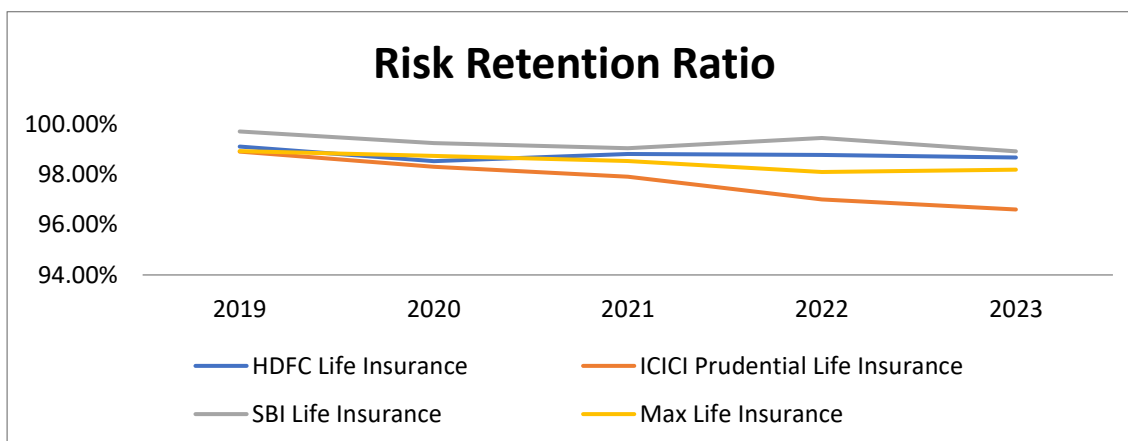


Here we can see that the Max Life Insurance is better at Asset Quality. The Max Life Insurance has a declining trend which is good as lower is better. The other Insurance company also seeing an declining stage which is good. The SBI came 4.14 from 5.16, ICICI came at 3.94 from 4.32 and HDFC needs to improve a bit.

### 3.Reinsurance and Actuarial related issue

**Table : IV Risk Retention ratio:**

Year	HDFC Life Insurance	ICICI Prudential Life Insurance	SBI Life Insurance	Max Life Insurance
2019	99.10%	98.90%	99.70%	98.92%
2020	98.52%	98.30%	99.24%	98.73%
2021	98.80%	97.90%	99.03%	98.53%
2022	98.77%	97%	99.44%	98.09%
2023	98.66%	96.60%	98.91%	98.18%



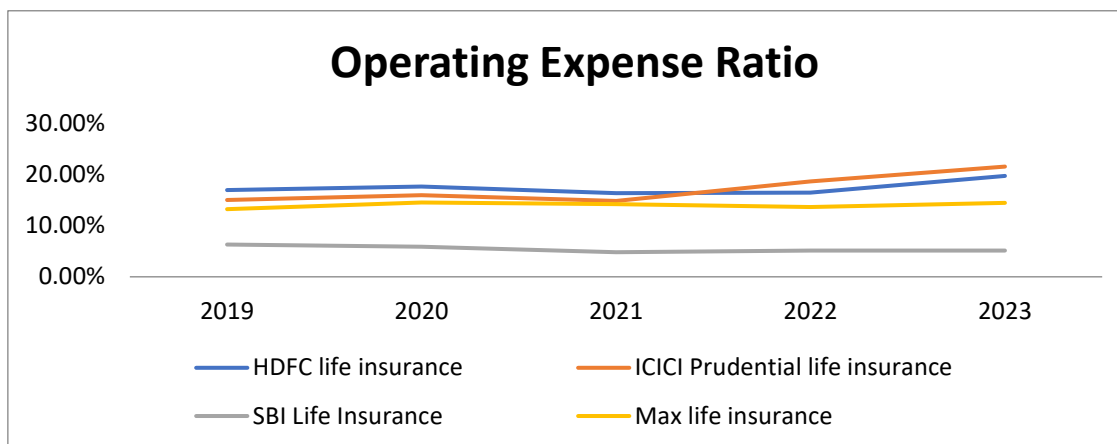
Every company is performing better here as having a good number at their side. Which shows that the company is managing its risk very efficiently. As from the data we can say Max Life Insurance showing the consistent performance while others seem to be in downward position.

### 4. Management Expense Ratio

**Table : V Operating Expense ratio:**

Year	HDFC insurance life	ICICI Prudential life insurance	SBI Life Insurance	Max life insurance
2019	16.90%	15%	6.30%	13.20%
2020	17.61%	15.90%	5.90%	14.50%
2021	16.32%	14.80%	4.80%	14.20%
2022	16.43%	18.60%	5.10%	13.62%

2023	19.68%	21.50%	5.10%	14.40%
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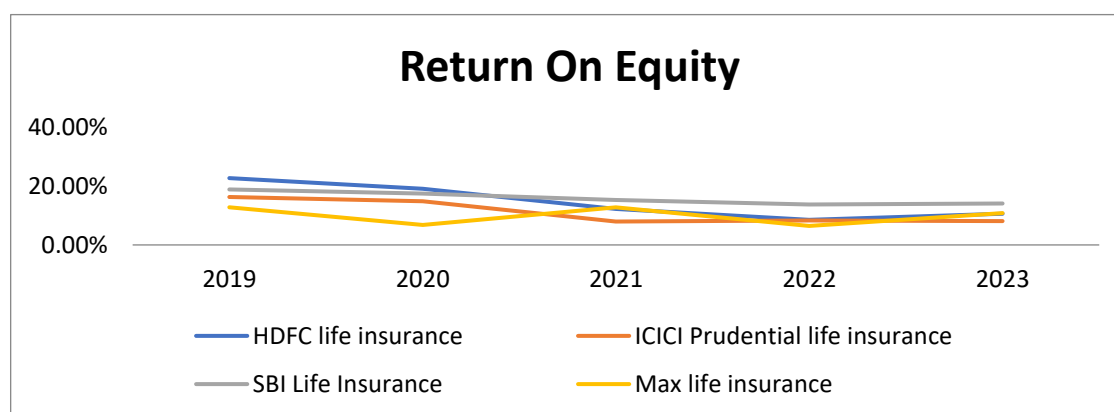


The lower the better, So here SBI is clearly performing better as it's operating expense is 5.10 which is better than all other life insurance company. Then MAX Life Insurance which has a 2<sup>nd</sup> best position. Whereas the operating expense ratio is increasing for the HDFC as well as ICICI. Which needs to be look upon as if it rise then profitability will go down.

### 5.Earning and Profitability Ratio

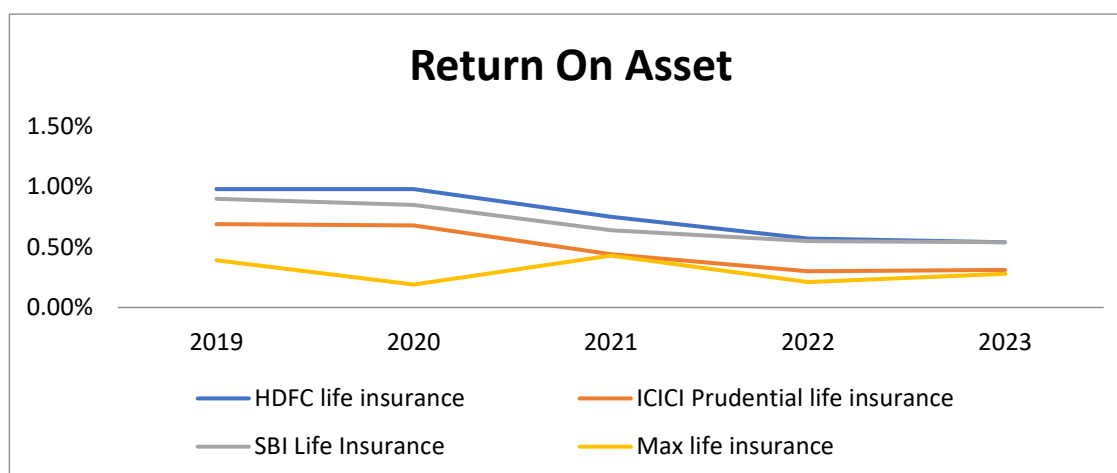
Table : VI Return On Equity:

Year	HDFC insurance life	ICICI Prudential life insurance	SBI Life Insurance	Max life insurance
2019	22.64%	16.24%	18.80%	12.75%
2020	19.07%	14.80%	17.40%	6.75%
2021	12.15%	7.92%	15.20%	12.72%
2022	8.50%	8.25%	13.70%	6.43%
2023	10.53%	8.06%	14.00%	10.75%



**Table : VII Return on Assets**

Year	HDFC life insurance	ICICI Prudential life insurance	SBI Life Insurance	Max life insurance
2019	0.98%	0.69%	0.90%	0.39%
2020	0.98%	0.68%	0.85%	0.19%
2021	0.75%	0.44%	0.64%	0.43%
2022	0.57%	0.30%	0.55%	0.21%
2023	0.54%	0.31%	0.54%	0.28%

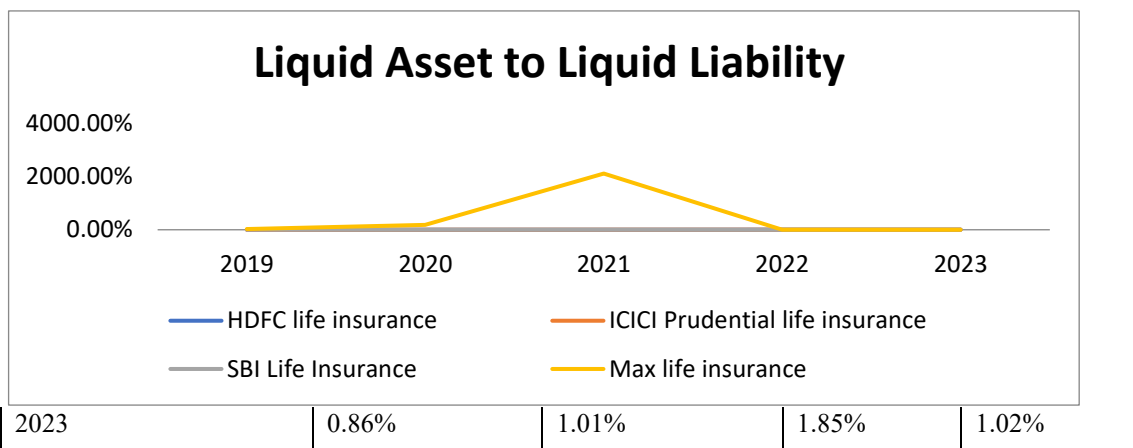


The ROE tells about the return made on the equity of the company, here SBI is performing better than other as making 14% of the return on Equity. The HDFC is worst performing as we can see it is in the steep declining stage. The ROA is more or less same only a little bit of difference. The ROA states how much the return is generated on the total asset of the company. We can say HDFC and SBI is having the same ROA.

### 6.Liquidity Ratio

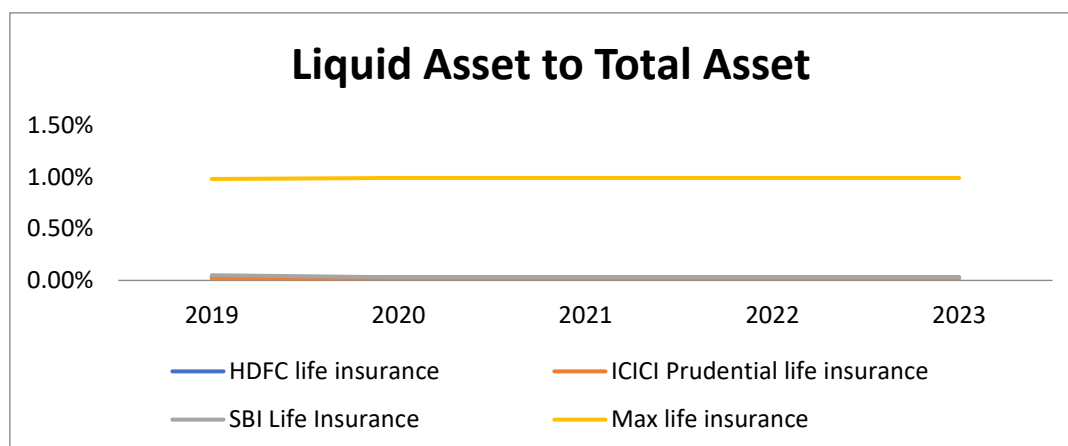
**Table : VIII Liquid Asset to Liquid Liability:**

Year	HDFC life insurance	ICICI Prudential life insurance	SBI Life Insurance	Max life insurance
2019	0.79%	0.91%	1.78%	28.41%
2020	0.87%	1.15%	1.93%	189.47%
2021	0.76%	1.04%	1.69%	2109.36%
2022	0.84%	0.93%	1.48%	1.05%



**Table : IX Liquid Asset to Total Asset:**

Year	HDFC life insurance	ICICI Prudential life insurance	SBI Life Insurance	Max life insurance
2019	0.03%	0.02%	0.05%	0.98%
2020	0.03%	0.02%	0.03%	0.99%
2021	0.03%	0.02%	0.03%	0.99%
2022	0.03%	0.02%	0.03%	0.99%
2023	0.03%	0.02%	0.03%	0.99%



The Liquidity tells that how much the company can pay their short-term obligation. Which shows the financial strength of the company. Here I would say that each company is showing the same performance as having the similar ratio. For Liquid asset to Liquid liability SBI is performing better than everyone. But in the Liquid Asset to Total Asset Max Life Insurance is at better position than every other Selected Life Insurance Companies. An anomaly was observed in Max Life's liquidity ratio (2109.36% in 2021). This unusually high value likely reflects an extraordinary increase in liquid assets or a temporary drop in short-term liabilities during that fiscal year. Such discrepancies should be explored further through detailed financial disclosures or management commentary to ensure accurate interpretation.

#### IV. CONCLUSION

The Capital Adequacy of HDFC Life Insurance is superior to the other selected companies, indicating its ability to protect policyholders and promote the stability and efficiency of the financial system. HDFC Life Insurance's strong capital adequacy positions it favorably in terms of absorbing losses from claims, which benefits the company, its customers, and the broader economy.

In contrast, the Asset Quality of Max Life Insurance is found to be better than the other companies, reflecting positively on its financial health and risk management capabilities. HDFC Life Insurance's perceived lag in this aspect highlights potential areas for improvement, emphasizing the importance of monitoring and managing asset quality to maintain financial strength and protect policyholders' interests.

The Reinsurance and Actuarial Ratios suggest that all the selected companies are effectively managing their risks, contributing to their financial stability and resilience. This efficient risk management enhances trust among policyholders and stakeholders, ensuring the long-term viability of these insurance companies.

SBI Life Insurance's superior performance in the Management Soundness Ratio indicates strong management capabilities in controlling expenses relative to earned gross premium, reflecting positively on its operational efficiency, profitability, and competitive position.

Furthermore, SBI Life Insurance's better performance in the Earnings and Profitability Ratio signifies strong profitability, efficient capital management, and financial stability, reinforcing its position as a leading player in the life insurance industry.

Lastly, SBI Life Insurance and Max Life Insurance's better Liquidity Ratio performance demonstrates their ability to maintain sufficient liquid assets to meet short-term obligations, enhancing their financial resilience and stakeholder confidence.

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Encl:

Equations of the Ratios:

1. Capital adequacy:

a) Share Capital to Total Assets Ratio =  $\frac{\text{Total Assets}}{\text{Share Capital}} \times 100$

Solvency Ratio: The ratio is a measure of risk faced by insurers relating to claims which can not be absorbed by it. It is calculated as:

b) Solvency ratio:  $\frac{\text{Net Assets}}{\text{Net Premium Underwritten}} \times 100$

2. Asset Quality: Asset quality ratio measures the degree of exposure to equity risk. For computing this ratio Equity is divided by Total assets.

Asset Quality Ratio:  $\frac{\text{Equity}}{\text{Total Assets}} \times 100$

3. Risk Management

Risk Retention Ratio: The ratio serves as an indicator of insurance risk management policy of insurers.

Risk Retention Ratio:  $\frac{\text{Net Premium}}{\text{Gross Premium}} \times 100$

4. Management Soundness Ratio: The ratio serves as an indicator of efficient management system because inefficient management could flag potential problems in key areas.

Management Soundness =  $\frac{\text{Operating Expenses}}{\text{Gross Premium}} \times 100$

5. Earnings / Profitability Ratios:

a) ROA (Return on Asset) =  $\frac{\text{Net Profit}}{\text{Total Asset}}$

b) ROE (Return on Equity) =  $\frac{\text{Net Income}}{\text{average total equity}}$

6. Liquidity Ratio: The ratio identifies the vulnerability to loss resulting from forced sale of illiquid assets.

a) Liquid Ratio:  $\frac{\text{Liquid Assets}}{\text{Current Liabilities}} \times 100$

b) Liquid Asset to Total Asset =  $\frac{\text{Liquid asset}}{\text{Total Asset}} \times 100$

List of companies

List of Private Sector life Insurance Company:

<b>S.no.</b>	<b>Private sector life insurance companies</b>
1.	Max life Insurance Company Limited
2.	TaTa AIA Life Insurance Company
3.	ICICI Prudential Life Insurance Company
4.	HDFC STD Life Insurance Company
5.	Bharti Axa Life Insurance Company
6.	Exide Life Insurance Company
7.	SBI Life Insurance Company
8.	DHFL Pramerica Life Insurance
9.	Aditya Birla Sun life Insurance Company
10.	AEGON RELIGARE Life Insurance