

A REVIEW PAPER ON FINANCIAL PERFORMANCE ANALYSIS OF INSURANCE COMPANIES IN INDIA

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ABSTRACT

The company's implementation contributes significantly to the expansion of the industry, which in turn leads to the economy's overall success. Various financial ratios have been created to assess it, considering the insurance players' liquidity, solvency, profitability, and leverage. In general, company and insurer profitability may be used to estimate performance. The research evaluates the influence of solvency, leverage, liquidity, scope, and impartiality capital on the productivity of life insurers in India in order to accomplish the target. Financial performance analysis looks at a company's total economic health during a time interval. It is the method of determining a company's financial assets and limitations by effectively establishing the link among profit and loss account and balance sheet elements. It gives a clear framework for assessing and comprehending the company's situation. Several insurance firms' Altman Z scores are compared in the simulation, and their performance is described based on the findings.

Keywords: Altman Z score, Financial distress, Insurance Companies, Financial performance.

INTRODUCTION

The method of evaluating a company's economic weaknesses and strengths by building a suitable link with the balance sheet and profit and loss account details is recognized as financial performance (FP) analysis. It also helps with forecasting and growth in the near and long term [1]. FP in a wider reason indicates to the level to which the organization's financial objectives have been fulfilled. It is a way for evaluating the relationship between different financial statement components to have a well awareness of the company's status and execution. It is applied to evaluate a company's entire economic health on time, and to evaluate companies in the similar industry or areas as a whole. It is the technique of establishing the financial cost of a company's policies and activities [2].

FP analysis is the assessment and understanding of financial accounts to offer a comprehensive assessment of a company's productivity and financial stability. The financial analyst program commands students on how to do crucial financial analysis. It suggests a structured approach to examining and understanding the company's predicament. To assess a company's financial situation, ratio analysis, comparative statement analysis, common size statement, cash flow analysis, decision theory, and other methodologies are employed [3].

To show how lucrative a company's operations are, profitability ratios evaluate income statement accounts and classifications [4]. Profitability ratios measure the return on investment in inventory and other assets. These figures effectively show how lucrative a business's operations are [5]. Investors and creditors may utilize profitability ratios to evaluate a company's return on investment centered on its virtual quantity of sources and benefits. Profitability ratios may be applied to determine if a company's assets offer sufficient operational profit. In the same way as efficiency ratios illustrate how successfully organizations utilize their assets to create profits, profitability ratios do the same. Profitability is also important in terms of solvency and continuing operations [6].

To assess the financial health of the selected institutions, Altman's Z-Score methodology was predominantly employed. The financial data was analyzed using a variety of statistical tools and methods, such as mean and correlation. Altman's Z-Score formula is a multivariate algorithm that analyzes a company's FP using fundamental financial measures. It determines the likelihood of a firm going bankrupt during the years.

1.1. Concept of Financial Performance

Financial performance refers to a company's overall accomplishments with respect to earnings, sales, and growth as measured in dollars. It is a crucial factor in the survival and expansion of a company [7]. Financial performance measures a company's capacity to make profits over a certain time period, usually assessed on an annual basis by comparing its performance to that of prior years and one or more other firms in the same industry.

Return on Equity (ROE), Earnings Per Share (EPS), Return on Capital Employed (ROCE), Return on Assets (ROA), and others are examples of FP indicators or measurements. The majority of these financial performance indicators are calculated using relevant ratios for example profitability, efficiency, and investor or stock ratios [8].

For an accounting period, ROA is defined by dividing total earnings by overall resources. This ratio assesses a company's capacity to create profits via the effective use of all of its assets. It shows how effectively a company's assets are put to work in order to earn profits [8]. A greater ROA indicates that the company's resources are being used efficiently, and vice versa.

ROE is a metric that measures how much profit a company made in relation to the overall number of shareholders' parity disclosed on the balance sheet for a certain period. It is a gauge of their investment's return. A corporation with a strong return on equity might produce cash internally by keeping profits or through other methods [9]. A higher ROE indicates that the company's FP and rate of return on its shareholders' money is better.

Return on capital employed (ROCE) is estimated through dividing a company's operational profits by means of its overall resources minus current liabilities over a period of time. However, due of its ease of manipulation and seasonal changes, it has been claimed that the variable is not a useful measure of evaluation. The ROA is utilized as a surrogate for a FP statistic in the research. This statistic is employed as it is a direct result of management's capacity to develop skills and a performance indicator that indicates a company's overall profitability [10].

1.2. Internal Variable that Establishes financial Performance

Capital structure, liquidity, business scope, income growth, gain margin, and solidity are the internal factors analyzed in the study to assess financial performance.

Capital Structure

The financial structure of a company is a critical factor in its long-term survival, development, and viability. Retained earnings (Reserves), equity, and debt finance make up an entity's capital structure, which includes retained earnings (Reserves), equity, and loan finance [11]. The selection and strategy of capital structure has a significant influence on an entity's capacity to operate in a competitive business environment, produce profits, and return [12-14]. It calculates the returns to funds providers by considering all of the owners' money and obligations.

Liquidity

The level to which existing obligations due for completion in one accounting year may be paid as of the company's overall recent resources without impacting the company's operational activities is referred to as liquidity. From a company's liquidity, three ratios may be calculated: cash ratio, and rapid or acid test ratio. Liquidity of an object indicates the company's temporary soundness and, if effectively achieved, must have a beneficial influence on its financial success.

Company Size

The entire assets of a firm are referred to as the entity's size [15]. Current and non-current properties, unquantifiable and fictional properties make up total assets [16]. There are resources that are within the control of an entity and are utilized to generate revenue. If an entity continues to provide and develop additional properties for the goal of continued survival, it is considered a going concern and stays in business [17].

Age of Entity

The age of a business refers to how long it has been in existence from its inception or when it was first registered on the stock exchange. It is believed that as an entity's age increases, so does its market share of the things it produces, and vice versa. Because of the favorable reputation established by a company's product, financial performance is projected to be positive [18][19].

Sales Revenue Growth

Sales growth refers to a rise in revenue resulting from product sales over time [20]. The sales growth ratio is applied to determine how quickly a company's revenue is increasing. When sales fall, the result is a destructive evolution rate. It depicts the percentage of increase in a company's operating revenue over the prior period. The ratio is predicted to rise year after year, with a beneficial influence on the entity's financial performance. FP and Profit Margin: One of the productivity measures utilized to assess the connection among profit after tax (PAT) and revenue over time is profit margin. The greater the ratio, the better an entity's financial performance [21].

Tangibility

This is involved with the company's total non-current assets. Property, Plant, and Equipment (PPE) refers to a company's tangible assets. They are resources bought for usage in the operation of a company rather than for sale, and they are the primary sources of revenue creation, affecting the business's financial performance. PPE divided by total assets is used to determine tangibility. Non-current asset investments are a significant strategic management decision, and companies' management resolve reflect the suitable timing for acquiring and disposing of non-current properties to ensure that processes, profitability, and financial performance are not harmed as a result of technological changes [21].

1.3. External Variables that Determine Financial Performance

Inflation and the Gross Domestic Product (GDP) are the two key external factors evaluated in the paper for determining company financial success.

Inflation

Inflation is described as a continuous growth in the overall intensity of goods and services in a nation around a lengthy time interval [22]. Inflation is described as a continual growth in the cost of services and goods over an extended period of time rather than a shorter period of time, and it is inextricably tied to money supply in an economy. The percentage shift in the consumer price index (CPI) is used to calculate it. It measures the cost of living and so provides a more accurate measure of people's well-being. Because the resources utilized by firms are acquired from the peripheral world, which considers the economic status of the nation at a given moment, inflation in an economy may have a negative impact on company financial performance [23].

Gross Domestic Product (GDP)

This is a widely applied indicator of financial development that is characterized as a rise in a country's economic performance metrics over a positive cycle of time. For a specific time period, it represents the total market cost of the entire commodities and services generated in a country [24]. When the economy grows, it is anticipated that company financial performance would improve as well.

FINANCIAL DISTRESS

Financial distress occurs when an individual or company is not capable to create sufficient income or money to join or pay its financial commitments. This might be because of large, fixed expenditures, a high share of illiquid assets, or revenue that is susceptible to financial declines. Bad budgeting, overspending, having too much debt, getting sued, or losing one's work may all lead to financial difficulties [25].

Ignoring warning signs of financial trouble before they become serious may be devastating. There may come a time when extreme financial suffering can no longer be rectified because the firm's or individual's obligations have become too great and cannot be repaid. If this occurs, bankruptcy might be the only choice.

This paper is distributed into 4 sections, the 1st section contains the brief introduction of the paper and 2nd section contain the related work of various authors. The 3rd section contains the comparative analysis, and the final section contains the conclusion and future scope.

REVIEW OF LITERATURE

There is various work given by the different authors which are given below:

Ginting et al. [26] stated that financial analysis, including financial ratio analysis and financial weakness and strength analysis, will be very helpful in assessing prior management routine as well as potential possibilities. Financial ratio analysis is a technique of estimating a company's performance by describing numerous financial connections and indicators. Its objective is to highlight historical changes in financial circumstances or operational performance, as well as the dangers and opportunities that the firm confronts, and to assist depict the trajectory of those changes.

Joshi et al. [27] has studied Altman's Z Score-Model examined the FP of a number of Altman's Z-Score average value was greater than the mandated safe zone cut-off points of 2.9, indicating that all of the choose banks were in the protected region. According to researchers, the banking industry's actions should be monitored on a regular basis to maintain unobstructed international financial flow.

Turgaeva et al. [28] stated that the internal control of business processes related to financial security and risk assessment in insurance businesses at this level of economic growth is a critical problem in the current period of economic calamities. Furthermore, this region of inside control is not yet completely established for application in the insurance industry. The work suggests a phased supervising of the evaluation of financial consequences of an insurance business and presents a procedure for measuring the financial protection of an insurance company under core management.

Mukherjee et al. [29] has the FP of General Insurance Re (GIC Re) utilizing performance ratios (PRs); next, the consistency of various FP indicators of GIC Re; 3rd, GIC Re's internal growth capacity; and the probability of GIC Re going bankrupt. The probability of GIC Re entering into financial crisis was examined applying a multivariate discriminant method, for example, customized Altman's Z-score model and logit analytic method, specifically, Ohlson's O-score model, to estimate the inner increase in potential of GIC Re. The researcher adds to the existing literature by presenting GIC Re's financial performance from several angles.

Rakshit et al. [30] stated that monitoring a company's financial health to avoid bankruptcy is not just of interest to owners, managers, and creditors, as previously considered, but also to the general public because of the potential implications of bankruptcy. There are several models for forecasting bankruptcy, but Altman's Z-score model is one of the best to utilized. The model has evolved through time, and now we have a model that can be used to manufacturing, service, public and private sectors, as well as firms in emerging markets, from its original form.

Etale et al. [31] examined the situation survey of Aluminum Extrusion Industries (ALEX) in Nigeria, there is a relation among capital structure and business performance. Debt to impartiality, debt to capital utilized, and parity to capital retained ratios were applied to indicate capital structure (the explanatory variable), while return on capital employed was applied to signify profitability. Secondary data was gathered from the chosen company's audited

financial statements from 2009 to 2018. For data analysis, they utilized descriptive statistics and the multiple regression estimation approach.

Apsari et al. [32] indicated that the Altman Z-Score is a measure for analyzing a company's probable insolvency. The Z-Score approach is extensively utilized and claims to be able to identify firm insolvency with an extreme level of accuracy. This study looked at 40 property and real estate businesses that were publicly traded on the Indonesia Stock Trade. The descriptive research approach was employed in this study. 27 firms are in a crisis, 11 companies are in a grey region, and two companies are healthy, according to the findings of the 40-company study. Matar et al. [33] stated that the FP of manufacturing industrial enterprises is influenced by a number of variables. Resultant information was gathered from the yearly publication "Financial Statement Analysis of Industrial Firms Listed on the Amman Stock Exchange for the Period 2005-2015" announced by the Amman Stock Exchange. The information was acquired from industrial enterprises' financial statements, namely their balance sheet and income statement.

Al-dalaïen et al. [34] has studied The Altman z-score model was utilized to analyze the FP of Jordanian insurance businesses. Financial performance analysis, according to researchers, looks at a company's entire financial health during a time interval. It was the method of correctly identifying the connection among the balance sheet and profit and loss account components to determine a company's financial strengths and weaknesses. It gives a clear framework for assessing and comprehending the company's situation. The intent of the survey was to evaluate the FP of 10 Jordanian insurance businesses during a ten-year period. Annual reports were used to gather data, and the Altman Z-Score Model was used to analyze their FP. Zhang et al. [35] stated that in light of the current financial crisis, researchers looked at a sample of 629 bank holding companies in the United States to see whether characteristics had an influence on financial difficulty. The authors discovered that the Z-Score metric was positively associated to the home price index and regulatory capital requirements. Furthermore, non-performing loans have an important role in anticipating financial trouble. Table 1 demonstrates the summary of the above work.

Table 1: Summary of Related Work

S.no.	Author	Year	Outcomes
1.	Ginting et al. [26]	2021	Its objective is to highlight historical changes in financial circumstances or operational performance.
2.	Joshi et al. [27]	2021	The banking industry's actions should be monitored on a regular basis to maintain unobstructed international financial flow.
3.	Turgaeva et al. [28]	2020	Presents a procedure for measuring the financial protection of an insurance company under core management.
4.	Mukherjee et al. [29]	2020	Adds to the existing literature by presenting GIC Re's financial performance from several angles.
5.	Rakshit et al. [30]	2020	The model has evolved through time, and now we have a model that can be used to manufacturing.
6.	Etale et al. [31]	2020	For data analysis, they utilized descriptive statistics and the multiple regression estimation approach.
7.	Apsari et al. [32]	2020	The descriptive research approach was employed in this study.

8.	Matar et al. [33]	2020	The information was acquired from industrial enterprises' financial statements, namely their balance sheet and income statement.
9.	Al-dalaien et al. [34]	2019	Annual reports were used to gather data, and the Altman Z-Score Model was used to analyze their FP.
10.	Zhang et al. [35]	2016	Non-performing loans have an important role in anticipating financial trouble.

COMPARATIVE ANALYSIS

In this section, comparative analysis is done on various parameters and based on those results are described.

1.4. Altman's Z-Score Model

The Altman's Z-Score Model [36] was established by Edward Altman, a finance professor at New York University's Leonard N. Stern School of Business, in 1967 to estimate the possibility of a company's bankruptcy. Later, in 2012, he developed an upgraded version known as the Altman's Z-Score plus Model, which can be utilized to analyze manufacturing and non-manufacturing organizations, as well as private and public companies in the United States and abroad. If investors are worried about the financial soundness of a company, they may use this model to assess whether to purchase or sell a certain stock. The Altman Z-score Plus may be applied to assess the credit threat of a company. Altman utilized a statistical approach named multivariate analysis to analyze not just the impact of numerous ratios on the "predictiveness" of his bankruptcy model, but how those ratios influenced each other's effectiveness in the pattern.

The Z Score Model is used to assess a company's financial health and estimate the likelihood of a company's failure in 2 years. Forecasting bankruptcy has been demonstrated to be quite accurate in a number of scenarios and marketplaces. According to studies, the model can accurately forecast bankruptcy in 72 percent to 80 percent of cases. The Z-Score does not use to every case. Table 2 shows the results of Altman's Z-Score Model [37].

Table 2: Results of Altman's Z-Score Model (2018-2019) [27]

Name of the Bank	Altman's Z-Score model average value
Central Bank of India	4.8285
Union Bank of India	5.2356
Canara Bank	5.1718
Indian Overseas Bank	5.0500
Bank of Baroda	5.4683
Punjab National Bank	5.16201
State Bank of India	4.9258
Bank of India	5.3392

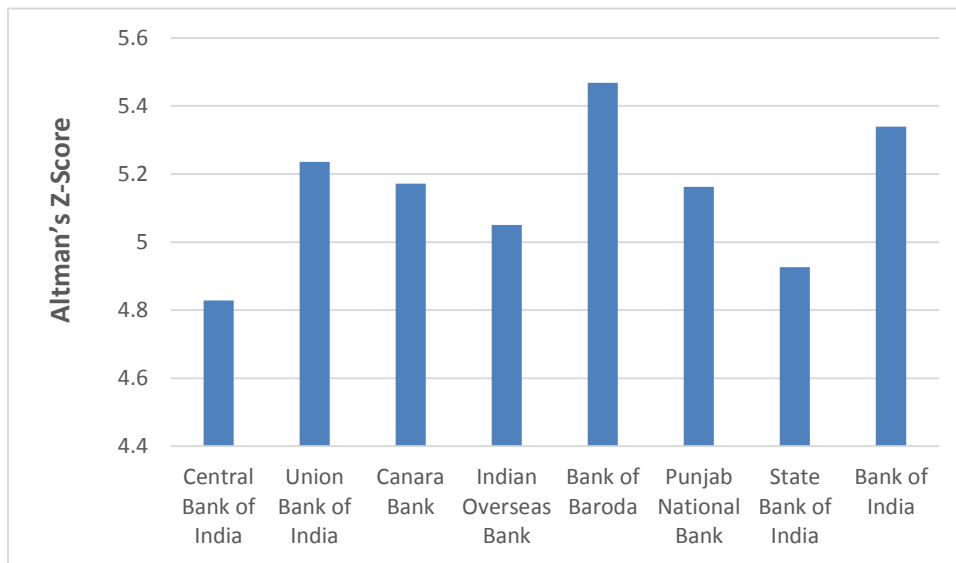


Figure 2: Altman's Z-Score model average value for (2018-2019)

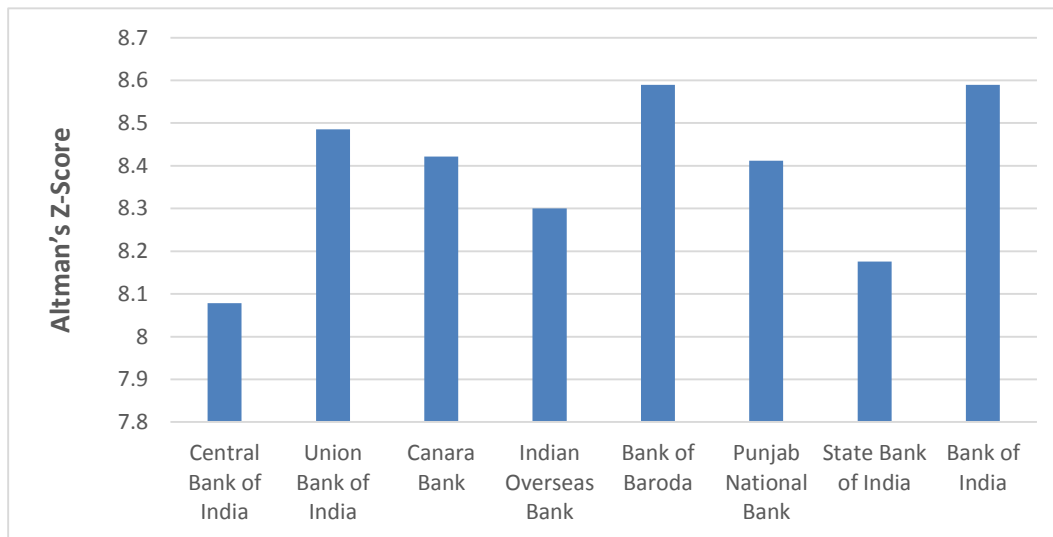


Figure 1: Altman's Z-Score model average value for (2019-2020)

Table 3: Results of Altman's Z-Score Model (2019-2020) [27]

Name of the Bank	Altman's Z-Score model average value
Central Bank of India	8.0785
Union Bank of India	8.4856
Canara Bank	8.4218
Indian Overseas Bank	8.3000
Bank of Baroda	8.5892
Punjab National Bank	8.4120
State Bank of India	8.1758
Bank of India	8.5892

CONCLUSION AND FUTURE SCOPE

Financial performance analysis is the method of establishing a company's financial assets and vulnerabilities through properly identifying the link among profit and loss and balance sheet account components. It is a method for determining the link among the various modules of financial statements in order to have an improved perception of the company's condition and execution. It gives a transparent framework for assessing and comprehending the company's situation. The Altman's Z-Score average value of different banks is compared in the comparative analysis for (2018-2019) and (2019-2020) based on the analysis, with Bank of Baroda having greater Z-Score in both comparisons. For the future scope there are several additional methods and models for doing financial analysis. A financial comparison between the private sector and overseas banks, as well as public sector banks, may be conducted.

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