



FINANCIAL PERFORMANCE ANALYSIS OF SELECT INDIAN LOGISTIC COMPANIES USING ALTMAN'S Z SCORE MODEL

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Abstract

The logistics sector in India is considered crucial to boosting international commerce as it contributes immensely to the growth of the economy. It ensures quick, inexpensive and efficient transportation of goods and all other commercial sectors depend on it, the industry is rapidly evolving and has evolved as the backbone of the Indian economy. It plays a crucial role in India's foreign trade; India is one of the largest exporters of textiles, pharmaceuticals, and agricultural products globally. The efficient movement of goods has helped reduce transportation costs, which has a positive impact on the overall cost of goods. This has helped Indian businesses become more competitive in both domestic and international markets. The present study focuses on financial evaluation of five logistics industries in India. It using Altman's Z score and the period of study is 2019-2023. About this study to attempt to know the companies financial performance and efficiency through the Altman's Z score.

Key words: Logistics Industry, Altman's Z score, Finance

Introduction

The Indian logistics industry is growing, due to a flourishing e-commerce market and technological advancement. The logistics sector in India is predicted to account for 14.4% of the GDP. The logistics industry employs over 22 million people in the country, making it one of the largest employers in India. The industry is crucial for the efficient movement of products and services across the nation and in the global markets. The logistics business is highly fragmented and has over 1,000 active participants, including major local players, worldwide industry leaders, the express division of the government postal service, and rising start-ups that focus on e-commerce delivery. The industry includes transportation, warehousing, and value-added services like packaging, labelling, and inventory management. With the advent of technology-driven solutions such as transportation management systems (TMS) and warehouse management systems, India's logistics industry has witnessed tremendous development in recent years (WMS). These solutions have assisted logistics firms in increasing operational efficiency, lowering costs, and improving customer service.

What is the importance of finance in industries. Finance plays a vital role in the success of businesses. Finance is important because it allows us to plan for the future by enabling informed decisions to be made about how to allocate resources, where to spend, and where to save to reach the short, medium and long term goals of the business.

Review of Literature

Dr.A.Panneerselvam M. Senthilkumar (2016) The study analysed financial performance of the selected cement companies in India using Altman's Z-score model. The period of the study was ten years from 2004-05 to 2013-14. The study found that financial soundness of all companies was good during the study period, since its overall Z-score was more than the standard during all the years of the study period. Except JK Cements Ltd. and India Cements Ltd. was not good since in no year their calculated Z-score was more than the standard. It was also observed that financial soundness of Barak Valley Cements Ltd. and Ramco Cements Ltd. was also not satisfactory during the study period.

Dr. Sreenivas C.Ramshesh (2019) "An Analysis of Financial Performance of Petroleum Companies By Using Altman Z - Score Analysis (With Special Reference to Bharat Petroleum Corporation Ltd, Indian Oil Corporation Ltd & Hindustan Petroleum Corporation Ltd)". The present study intends to analyze the financial health of selected oil companies through the application of altman z score model. It is found that the financial health of the selected companies under study is Bharat Petroleum Corporation is relatively better than Indian Oil Corporation and Hindustan petroleum.

Vivek Prasad, K Uma, D Murugananthi, R Pangayar Selvi and M Priyadharshini (2022) "Financial efficiency analysis using Altman Z score model for selected seed and fertilizer companies in India" The information was gathered during a ten-year period, from the financial years 2011-12 to 2020-21. This paper aims to investigate the reliability of Altman Z-score model in predicating the possibility of financial failure that threaten agriculture input industry in India, at least a year before its occurrence. To figure out the financial efficiency of the various seed and fertilizers companies, Altman Z score model was used for the study. The study revealed that in seed three companies were in safe zone and one company was in grey zone. In fertilizer companies it was found that three companies were in grey zone and one company was in distress zone. The financial health of the companies was analysed.

Objectives of the study

1. To study the financial performance and soundness of select logistics companies in India.
2. To predict the companies bankruptcy structure using Altman's Z score model.
3. To give suitable suggestions and recommendations.

Research Methodology:

The present study covers logistics industries in India and taken five companies i.e., Aegis logistics, Ritco logistics, Flomic global, sancos Trans and Chartered Logis. This is based on secondary data collected from

annual report of the companies period of five years(2019-2023). To analysis the financial performance of logistics industries study has been used Altman Z Score model as a statistical tool.

Z-Altman's Score

As per the Z-Score model, the safe zone started from the range 2.99, the value greater than 2.99 showed that the company was financially good. The grey zone of Z – score model ranges between the values 1.81 to 2.99, that indicated that company's financial health was good and there will be low chances of bankrupt in near future. Below the Z – score 1.81, the company falls the category of Distress zone, which indicates that company's financial performance was not good.

Z score was formulated for predicting bankruptcy of public listed firms and was published by Edward I. Altman in 1968.He was working as assistant professor of finance at New York University. The Z score predicts probability of firms going bankruptcy within two years. The Z score comprises of five variables names are A, B, C, D and E.

Formula

$$Z\text{-Score} = (1.2*A) + (1.4*B) + (3.3*C) + (0.6*D) + (1.0*E)$$

Where,

Z = DISCRIMINANT FUNCTION SCORE OF A FIRM.

A = WORKING CAPITAL/TOTAL ASSETS

B = RETAINED EARNINGS/TOTAL ASSETS

C = EARNINGS BEFORE INTEREST & TAX/TOTAL ASSETS

D = MARKET VALUE OF EQUITY/TOTAL LIABILITIES

E = SALES/TOTAL ASSETS

Altman's Guidelines

Situation	Zscore	zone
I	Below 1.8	Not Healthy
II	1.8 - 2.99	Healthy
III	More than 3.00	Too Healthy

Table A=Working Capital/Total Asset					
Year	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Aegis Logistic	-0.07	-0.03	-0.06	0.02	0.36
Ritco Logistic	0.41	0.41	0.39	0.37	0.27
Flomic Global	0.02	0.11	0.10	0.09	0.10
Sanco Trans	-0.07	-0.04	0.01	0.06	0.06
Chartered Logis	0.16	0.13	0.16	0.13	0.19

The above table shows liquidity position of the company. The companies working capital is trend is fluctuating during the study period. Compared in all the companies ratio is below the standard norms. Ritco logistic, Chartered logis and Filomic global represents positive results these companies position is good compare to other companies. Aegis logistic, Sanco trans represents negative results.

Table B=Retained Earnings/Total Asset					
Year	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Aegis Logistic	0.54	0.54	0.37	0.60	1.44
Ritco Logistic	1.96	2.04	1.89	1.97	2.07
Flomic Global	0.06	1.56	1.70	2.69	2.94
Sanco Trans	0.68	0.69	0.63	0.54	0.74
Chartered Logis	1.12	1.19	1.28	1.37	1.00

The above table shows that the amount of reinvested earnings it reflect the extent of companies growth. All the companies earnings is above the standard norms. So the companies achieved the profitability does not need on borrowings.

Table C= Earnings before Interest and Taxes/Total Asset					
Year	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Aegis Logistic	0.10	0.00	0.09	0.21	0.39
Ritco Logistic	0.09	0.05	0.03	0.07	0.09
Flomic Global	0.00	0.00	0.03	0.09	0.09
Sanco Trans	0.00	0.00	0.03	0.08	0.01
Chartered Logis	0.02	0.00	-0.02	0.00	-0.01

The above table refers the ability to generate profit from its operations. All the companies operating level are good to get profit but Chartered company will control their expenses and get revenue to become profit.

Table D=Market Value of Equity/Total Liabilities					
Year	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Aegis Logistic	0.03	0.02	0.02	0.01	0.01
Ritco Logistic	0.12	0.10	0.10	0.08	0.07
Flomic Global	2.41	0.25	0.19	0.13	0.05
Sanco Trans	0.01	0.01	0.01	0.01	0.01
Chartered Logis	0.08	0.08	0.10	0.11	0.11

The above table refers total value of companies shares. All the selected companies represents positive relationship with equity to liabilities.

Table E=Sales/Total Assets					
Year	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Aegis Logistic	0.56	0.50	0.33	0.50	1.16
Ritco Logistic	1.95	2.02	1.88	1.96	2.06
Flomic Global	0.00	1.54	1.68	2.68	2.92
Sanco Trans	0.72	0.68	0.72	0.86	0.80
Chartered Logis	1.11	1.18	1.26	1.36	0.97

The above table shows that efficient uses of assets to generate profit. All the companies are generating good sales to increase profitability.

Table F= Z SCORE					
Year	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Aegis Logistic	1.59	1.23	1.07	2.07	4.90
Ritco Logistic	5.55	5.58	5.16	5.45	5.62
Flomic Global	1.56	3.99	4.41	6.95	7.48

Sanco Trans	1.58	1.62	1.72	1.96	1.95
Chartered Logis	2.96	3.06	3.23	3.50	2.65

The above table shows that Z Score analysis of selected logistic companies in India. Ritco logistic, Flomic global and Chartered logis represents the Z score value is more than 3 which represents the companies are financially too healthy. Aegis logistic and sancos trans represents the Z score value is below 3 which represents the companies are financially healthy.

Suggestions:

1. Few companies working capital ratio represents negative results, that companies must concentrate their current liabilities.
2. Earnings of all companies are good. So the companies are maintaining this level to grow profit.
3. Comparing to all companies financial soundness is healthy. So the companies should follow the financial performance.

Conclusion:

Overall, the Altman's Z score model with financial ratios as variables can be used to estimate the companies' financial performance and potential distress. For taking any decisions in business financial health is very important. The present study reveals that selected all logistic companies financial performance is healthy.

References:

1. Dr. Kavitha Lal "A STUDY ON FINANCIAL PERFORMANCE OF SELECT INDIAN LOGISTIC FIRMS USING ALTMAN'S Z SCORE" 2018 IJCRT | Volume 6, Issue 1 February 2018 | ISSN: 2320-2882 pg:1150-1152.
2. MR. Karthikeyan Rabinaya V Arun Prassath J "APPLICATION OF ALTMAN Z-SCORE MODEL TO ANALYSE THE FINANCIAL PERFORMANCE OF MARUTI SUZUKI INDIA LIMITED" 2022 IJCRT | Volume 10, Issue 7 July 2022 | ISSN: 2320-2882 pg" 339-343.
3. Anuja Mandvekar "Measuring the Effectiveness of Altman's Z Score on Indian Companies" IJSR ISSN :2319-7064 Volume 9 Issue 8 Aug2020 pg: 198-202.
4. Manoj Kumar Joshi "FINANCIAL PERFORMANCE ANALYSIS OF SELECT INDIAN PUBLIC SECTOR BANKS USING ALTMAN'S Z-SCORE MODEL" Smart Journal of Business Management studies (A Professional, Refereed, International and Indexed Journal) DOI : 10.5958/2321-2012.2020.00018.4 ISSN 0973-1598 (Print) ISSN 2321-2012 (Online) Vol. 16 No.2 July - December 2020 pg: 74-87.
5. www.Investopedia.com