

A STUDY ON FINANCIAL PREDICTION OF SELECTED TEXTILE COMPANIES USING Altman Z-SCORE MODEL AND WORKING CAPITAL MANAGEMENT

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ABSTRACT

The textile industry plays an important role in the Indian economy and has developed significantly over the years. The purpose of this study is to analyze working capital management and to make a bankruptcy prediction in the textile industry. Working capital management is important for any business to ensure that the business is able to carry on its business and has the sufficient cash flow to service its short-term debt. Working capital refers to the funds available for the day-to-day operations of a company. Working capital supports short-term operating costs and maintains sufficient cash flow to maximize profitability. This study aims to analyze the working capital management of five selected textile companies over a five-year period. The research is conducted on five selected textile companies and is based primarily on secondary data. Secondary data are obtained from the moneycontrol.com and websites of five selected textile companies. The period of study is limited to five financial years from 2017-2018 to 2021-2022. The efficiency of working capital management is assessed using ratio analysis and the Z-score model. The results from the study reveal whether the five selected textile companies are using their working capital efficiently.

KEYWORDS: Working capital, Ratio analysis, Altman's Z-score model

INTRODUCTION

Every business needs funds for its establishment and to carry out its day-to-day operations. To carry out any business operation funds are needed. The life or death of any business enterprise depends upon the availability of funds. Funds that are invested in current assets are known as working capital. The overall success of a business depends upon its working capital. Therefore it should be utilized effectively and efficiently. A business that has ample working capital is always in a position to avail advantages for higher profit. Management of current assets is concerned by working capital management. Many companies get failure because of improper management of their capital. They may be profitable, but they would not be able to pay their bill. . If the firm has its

adequate working capital, it will maintain the goodwill of the company and would able to maximize the profit. With adequate and appropriate working capital financing ensures that the firm has sufficient cash flows to pay its bills and to maximize the profit.

OBJECTIVES

- To understand the concept of Working Capital Management and Z score analysis.
- To analyze the efficiency and uses of working capital management and Z-score analysis in selected textile companies.
- To know the liquidity position and Financial health of the companies.

NEED

- To analyze the working capital management and Z score of the company.
- To understand the relationship between working capital and profit.
- To give suggestions to improve the performance of working capital management and Z score in the company.

SCOPE

The study helps the company to invest more in short-term assets over liabilities. The study was conducted for five financial years from 2017 – 2018 to 2021 – 2022 with five selected textile companies. The study focuses on the working capital management of the five selected companies. The study is mainly based on secondary data.

RESEARCH METHODOLOGY

The study is based on secondary data that are available on the money-control, com, and websites of selected textile companies. The study is descriptive and analytical in nature, as an effort has been made to illustrate the different areas of working capital management in the selected textile companies. The tool used for the study is the solvency test using Altman's "Z" score model.

ANALYSIS AND INTERPRETATION

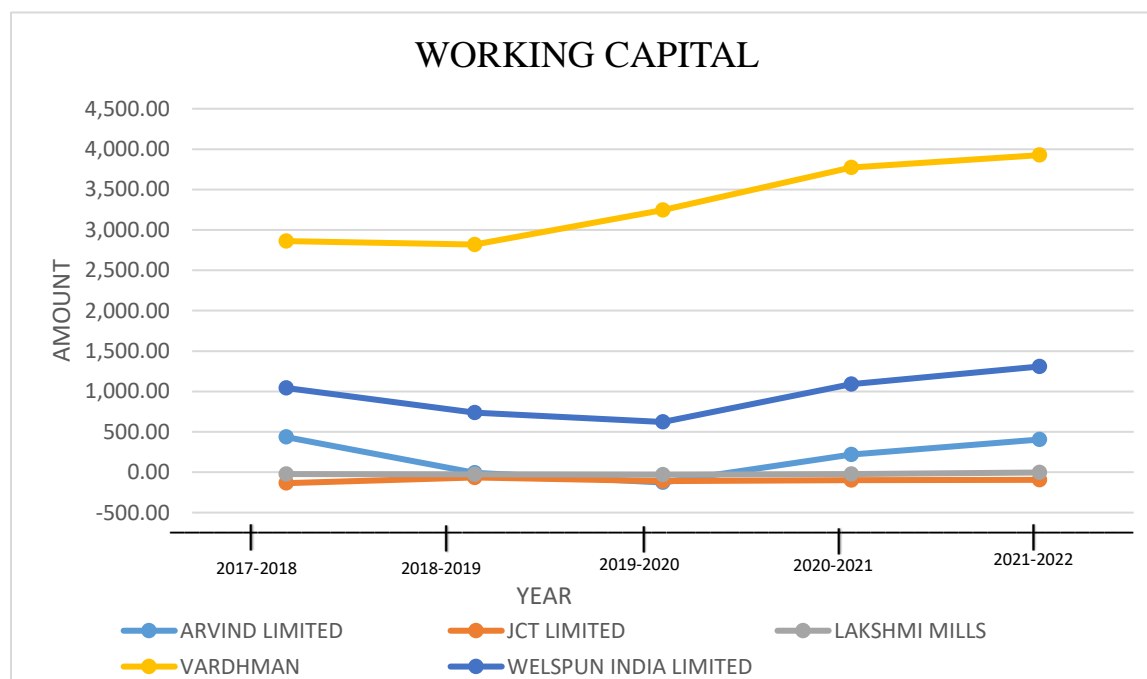
The data analysis and interpretation of the five selected textile companies are as follows.

WORKING CAPITAL:

(Amount in Crores)

The following table represents the working capital of five selected textile companies for five financial years:

YEAR	ARVIND LIMITED	JCT LIMITED	LAKSHMI MILLS	VARDHMAN	WELSPUN INDIA LIMITED
2017-2018	434.59	-135.69	-22.08	2,859.90	1,042.20
2018-2019	-6.14	-64.9826	-28.98	2,818.93	737.10
2019-2020	-127.76	-108.2825	-31.69	3,247.04	621.80
2020-2021	217.62	-100.04	-23.93	3,773.57	1,090.80
2021-2022	403.70	-93.07	-3.59	3,925.56	1,308.60



INTERPRETATION:

The above line chart represents the working capital of five selected companies for the five financial years from 2017-2018 to 2021-2022. Arvind Limited, JCT Limited, and Lakshmi Mills were the three companies in negative which mean they were exceeding their current income and assets. These three companies were not maintaining the working capital properly to meet their current

obligations. The other two companies, Vardhman and Welspun India Limited were increasing their working capital that is they were able to meet their current obligations.

Z-SCORE MODEL:

Professor Edward Altman has established a new technique that considers the five key performance ratios combined into a single score called z-score which provides investors with a better picture of a firm’s financial health. This technique uses five ratios to determine the firms' financial problems and operating crises.

Z SCORE CALCULATION

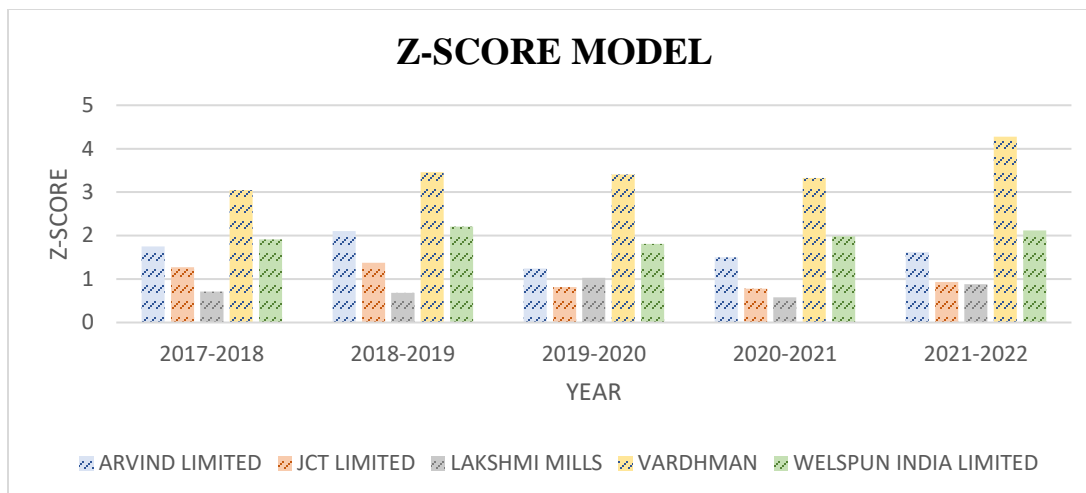
• X1 = Working capital/Total of firm’s Assets
• X2 = Retained earnings/Total of firm’s Assets
• X3 = EBIT/Total of firm’s Assets
• X4 = Capital fund/Total firm’s Liabilities
• X5 = Sales/Total firm’s assets

Z-SCORE RANGE	ZONE	DISTRESS LEVEL
Z > 2.99 (Above 2.99)	Safe Zone	No Distress
1.81 < Z < 2.99 (Between 1.81 to 2.99)	Grey Zone	Stable but Weak
Z < 1.81 (Below 1.81)	Bankrupt Zone	Severely Distressed

$$\text{Z-score} = 1.2(X1) + 1.4 (X2) + 3.3 (X3) + 0.6 (X4) + 1.0(X5)$$

The following table represents the Z-score of five selected textile companies for five financial years: (Amount in Crores)

YEAR	ARVIND LIMITED	JCT LIMITED	LAKSHMI MILLS	VARDHMAN	WELSPUN INDIA LIMITED
2017-2018	1.752399	1.2733745	0.710194	3.05056	1.91483
2018-2019	2.103262	1.3745002	0.682467	3.4577	2.20941
2019-2020	1.246382	0.8183592	1.032065	3.41125	1.80672
2020-2021	1.501703	0.7774232	0.578936	3.32549	1.99006
2021-2022	1.61517	0.9349042	0.883001	4.27894	2.11818



INTERPRETATION:

The above bar chart represents the Z-score of five selected companies for the five financial years from 2017-2018 to 2021-2022. Among the five selected companies, Vardhman is maintaining its z-score and is in a safe zone from bankruptcy. The other companies have the possibility of going bankruptcy in the following years.

FINDINGS:

The findings of the five selected textile companies are as follows:

- From the financial year 2017-2018 to 2021-2022, the working capital of Arvind Limited has decreased from 434.59 to 403.70. The working capital of the company is negative for two years. That is the company exceeds its current income and assets. Therefore the company should plan to manage its working capital efficiently.
- Even though the working capital is negative for JCT Limited, the company is increasing its current assets and decreasing its current liabilities. The current assets have increased from 266.8352 to 281.7564.
- The working capital is negative for the company, Lakshmi Mills. The company is increasing its current assets from 71.5621 to 93.1553 over the period of five financial years from 2017-2018 to 2021-2022.
- Vardhman is properly maintaining its working capital and it has increased its working capital from 2,859.90 to 3,925.56 over the period of five financial years. The company is able to meet its short-term obligations.

- Welspun India Limited is also properly maintaining its working capital and it has increased its working capital from 1,042.20 to 1,308.60 but there is a fluctuation in working capital for five financial years.
- The Z-score for the period 2017-2018 to 2021-2022 of Arvind Limited depicts that the company is under a bankrupt zone currently and though it is financially stable, adequate measures are needed to be exercised to survive the caution region. Consequently facing a downfall in the following years thereby causing a threat to the safe position of the company. It is not even in the border zone it should drastically improve in all aspects of finance.
- The Z-score for the period 2017-2018 to 2021-2022 of JCT Limited depicts that the company is under a bankrupt zone currently. The company was in the grey zone for the two financial years 2018-2019 and 2019-2020. Then the company is under the bankrupt zone for the past three years from 2019-2020, it is currently in a severely distressed state. It is been showing improvements sequentially, it can easily improve and turn to the grey zone back, with some sort of analysis and increase in sales.
- The Z-score for the period 2017-2018 to 2021-2022 of the Lakshmi Mills company depicts that the company is under a bankrupt zone currently, the Z score of the Lakshmi Mills company, for the five financial years from 2017-2018 to 2021-2022 states that the company is under the bankrupt zone for the past five years it is currently in a severely distressed state. It is draining year by year and shows a declining trend.
- The Z-score for the period 2017-2018 to 2021-2022 of the Vardhaman company depicts that the company is in a completely safe zone, they have been performing well throughout the five financial years and maintaining their finance in a healthy and safe state.
- The Z-score for the period 2017-2018 to 2021-2022 of the company Welspun India Limited depicts that the company is in a grey zone for the past two years but they have been showing a positive improvement in their financial state and they will be into the safe zone in upcoming years if they maintain the stability and improve the finances slightly year by year.

CONCLUSION:

The study reflects the company's performance and significant financial decisions are based on this consideration. The study compared and analyzed the financial performance of five selected

textile companies. This shows that most companies are not well positioned financially. Since the ability to survive well in the short term determines the lifespan of a company, companies should take reasonable steps to improve their working capital. The study highlights the need to improve working capital. Some companies have the possibilities of going bankrupt for the following years and caution should be taken. companies which are in safe zone can put much more efforts to stay away from bankruptcy for the following years.

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