



## Financial Health of Ambika Cotton Spinning Mills Limited- Pre and Post Financial Crisis: A Case Study

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### Abstract

The performance of spinning mill is severely affected by a number of problems such as high raw material cost, frequently power cut, high fuel cost and high interest charges and as a result will fail to earn any Profit for owner. It is also affected in the current global crisis and it is absolutely imperative for the government to prepare a long – term strategy for the growth and export of textiles. This article deals with financial distress, if which not tackled on time, will lead to bankruptcy. This article aims at using bankruptcy prediction model developed by Edward Altman, Professor of Finance, Stern school of business, New York University, the application of Z score method to Ambika cotton spinning mill Ltd., for the purpose of predicting its financial health. The conclusions drawn could provide effective guidelines to the management of that company spinning mills and their stakeholders.

**Keywords:** Financial Distress; financial crisis; ratios.

### Introduction

Indian textile industry is the second largest industry in the world after China and it is self-reliant and independent industry and has greater diversification and versatility. The textiles and garments industry is the second-largest employer in India after agriculture as it directly employs 35 million people and indirectly provides a livelihood to an additional 88 million. As per AEPC, this industry contributes nearly 3 to 4 percentages to GDP; Next to agricultural sector, it generates employment for more than 35 million people and excise collections nearly 9 percent and it contributes to 16 percent share of the country's export. About 27 percent of the country's foreign exchange comes from the textile exports. It contributes to nearly 14 percentage of the total industrial production of the country. "The impact of the global crisis has been transmitted to the Indian economy through three distinct channels, viz., the financial sector, exports, and exchange rates". This concern felt the necessities of analyzing the health of textile and garment production at Coimbatore in Tamil Nadu, and the main reason for their poor performance is high cost of production. Hence the present study has been undertaken.

A good financial analysis will help to identify the strengths and weaknesses of a company and facilitate a more informed management decisions. The company will be able to improve its financial image thereby enhancing its chances when applying a bank loan for various activities. Also, it will be able to identify and correct performance problem before they have a major impact on the business.

Financial ratio analysis is one of the important methods of analyzing a business. Financial ratios can be used to measure a firm's liquidity, solvency, profitability and efficiency in utilizing its assets. In addition, these ratios can be used to compare the performance of one company against those of its competitors or other members of the same industry. The ratios calculated intend to show broad trends and thus to help one with decision making.

### Meaning of Financial Distress

"Financial distress" is used in a negative connotation in order to describe the financial situation of a company confronted with a temporary lack of liquidity and with the difficulties that ensue in fulfilling financial obligations on schedule and to the full extent.<sup>12</sup> Very often, financial distress is determined in terms of failure, default, bankruptcy, or distressed restructuring.

## Review of Literature

**Suzanne K. Hayes, Kay A. Larry W. Hughes (2010)**, Z, a multiple discriminate analysis bankruptcy model using commonly accepted cut-off criteria, may provide a useful decision rule to predict financial distress in firms operating in a wide variety of industries. In this study, we outline the construction and interpretation of the Z-Score and apply it to several pairs of firms (N=17) from a variety of specialty retail industries spanning two consecutive years. Past research indicates that Altman's Z predicted future financial distress in 90 percent of the firms studied. In this study, all but two of the bankruptcies (94 percent) would have been accurately predicted. Despite some criticism of the model's efficacy, two firms were misclassified yet later revealed potential financial distress.

**Sasvimol Meeampol (2014)** "Applying Emerging Market Z-Score Model To Predict Bankruptcy: A Case Study Of Listed Companies In The Stock Exchange Of Thailand (Set) ". This research aims to examine the financial distress of the listed companies on the Stock Exchange of Thailand (SET). It will examine the percentage that this model fit to the data of companies listed on the Stock Exchange of Thailand (SET), which applies the Z-score model and the emerging Market Score (EM Z-Score model) created by Edward L. Altman. This study used the companies listed on the SET in 2012, which these firms must contain the NC (Non-Compliance) sign. Having organized the data, we have the final sample of 31 firms to be examined.

## Objectives of the Study

[1] To identify financial health of Sample textile mill.

[2] Offer Suggestion based on the findings.

## Methodology and Data Sources

The study is based on secondary data. The basic data for this study has been collected from the official directory of the Bombay stock exchange and PROWESS provide by Center for Monitoring Indian Economy (CMIE). The data base provides the financial statement, ratio analysis, fund flows, products profile, return and risk on the stock market. The published annual financial reports of the company's other reports like the company's magazines, published books and websites were also used for the purpose of the study. For the study Ambika cotton spinning mill has been purposively selected from the list of cotton spinning mills are listed in Bombay Stock Exchange (BSE). The company information has been collected on a number variable during the period from 2003-2004 to 2012-2013, covering 10 years.

## Framework of Analysis

### The Z Score Model

Edward Altman developed a model based on his own research using ratios which indicates the firm's solvency position. The concept is both simple and intuitive. Altman assembled a sample group of failed firms and a group of similar firms which had not failed. It was originally developed on a sample of manufacturing firms. The model uses common financial information such as 'sales revenue' and 'total assets' to derive five basic financial ratios. Each ratio is assigned a weight and summed together to produce the Z- Score.

**Altman Z score Approach for Pre and Post Recession Time Period of Ambika Cotton Mills Ltd**

Year	X1	X2	X3	X4	X5	Z scores	Re	Year	X1	X2	X3	X4	X5	Z scores	Re
2004	0.0925	0.3601	0.5972	0.1527	0.0775	2.3683	G	2009	0.0736	0.2764	0.4059	0.1109	0.0224	1.6169	D
2005	0.0772	0.3247	0.4270	0.1149	0.0581	1.7634	D	2010	0.0808	0.2932	0.4476	0.1320	0.0329	1.7852	D
2006	0.1344	0.3499	0.3766	0.1274	0.0623	1.6786	D	2011	0.0715	0.3245	0.6044	0.1841	0.0723	2.3535	G
2007	0.1391	0.2637	0.3770	0.1201	0.0022	1.5470	D	2012	0.0723	0.4419	0.8784	0.1783	0.0461	3.2763	S
2008	0.0912	0.2432	0.3405	0.1004	0.0283	1.3999	D	2013	0.0943	0.5125	0.9249	0.2034	0.0569	3.5175	S
<i>S → Z Score greater than 2.99 → Safe Zone</i>															
<i>G → Z Score between 1.8 to 2.99 → Grey Zone</i>															
<i>D → Z Score less than 1.80 → Distress Zone</i>															
<i>Re → Remark</i>															

The data have been examined by Altman's Z Score where as

$$Z \text{ score} = X1*0.717 + X2*0.847 + X3*3.107 + X4*0.420 + X5*0.998$$

X1= Net working capital to total Assets

X2= Retained earnings to total Assets or Net Profit to Net Sales

X3=Earnings before interest and tax to total Assets

X4= Market value of equity to total Liabilities or book value Equity to total Debt

X5= Net Sales to total Assets

To identify the future sickness of the company Altman's Z Score test is employed. If Z scores less than 1.80, the company said to be in distress zone. If Z score ranges between 1.80 and 3.99, the company is said to be in grey zone is the company may fall into sick zone. If Z scores is greater than 2.99 then the company is said to be in the safe.

### Z Score Analysis of Ambika Cotton Mills Ltd

For the purpose of predicting the financial health and capability of Ambika cotton mills ltd. the Z Score model has been applied. The data has been obtained from sample mills financial statement. The Z Score of the cotton mill has been computed for the last ten years. The above table shows the computation of various ratios for the purpose of arriving at the Z score of the cotton mill.

The above table illustrates the performance of **Ambika Cotton Mills Ltd** for the period 2004 – 2008 and 2009 – 2013. During the first phase 2004 – 2008, Z score value is ranging between 1.3999 and 2.3683 in the year 2008 and 2004

respectively. When Z score is less than 2.99 and it is found to be decreasing over the years, it implies the company may fall in Sick zone.

In the second phase 2009 – 2013, Z score is ranging between 1.6169 and 3.5175 in the years 2009 and 2013 respectively. During 2009 and 2010 the company performance is in distress zone i.e. Z score is less than 1.80. During 2011, Z score ranges between 1.80 and 2.99. **Thus company's performance has improved when compared to the previous year.** From 2012 and 2013 onwards, Z score is greater than 2.99 which assists the company to be in the safe zone comparing first and second phase of the performance of the company has improved during the second phase.

## Conclusion

The Z Score of the sample unit during the first phase 2004 – 2008 are less than 2.99 and it is found to be decreasing over the years, it implies the company may fall in Sick zone. But in the second phase in the year 2012 and 2013, Z score is greater than 2.99 which assist the company to be in the safe zone. By comparing first and second phase of the performance of the company has improved during the second phase

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