



## **PREDICTING FINANCIAL DISTRESS OF S KUMAR NATIONWIDE LTD – A COMPARISON OF ALTMAN’S Z SCORE MODEL AND OHLSON’S O SCORE MODEL**

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### **ABSTRACT**

**SKNL is one of India’s leading especially Textile and Apparel Company serving millions of its customers by catering the whole spectrum of Indian market covering different socio-economic segment. <sup>1</sup>The present paper aims at comparing the financial position or liquidity position of the above mentioned company by considering the two different model of financial distress. The main concern of the paper is to study the effectiveness of predictivity for financial Distress by using Altman’s Z score model and Ohlson’s O score model, most commonly used technique for finding financial distress. The study concludes that O score is notably more accurate as a predictor of bankruptcy compare to Z score. Keywords: Financial Distress Prediction, S Kumar Nation Wide Ltd, Altman’s Z score model, Ohlson’s O score model.**

### **INTRODUCTION**

SKNL is one of India’s leading especially Textile and Apparel Company serving millions of its customers by catering the whole range of Indian market. It has achieved excellence in its unique Expertise in multi-fibre manufacturing. It also markets the Reid and Taylor, Belmonte brands amongst other well recognised brand. It has achieved prototype against international

quality standard and have covered milestone to pinnacle.

### **FROM START TO PINNACLE**

S Kumar Group established in 1948 turned to public ltd as S Kumar Nationwide Ltd (SKNL) in 2000. It was at certain time highly known in manufacturing and Trading of Textile and Apparels with wide range of distribution network. At certain time it was one of the India’s top Textile and Attair Company with proficiency in multi fibre mechanised. The company has broad series of collection in different and variant product categories from fabrics to Apparels and Home Textiles.

For manufacturing and marketing of the product from Scotland, SKNL entered in joint venture with renowned company Reid & Taylor in the year 1998.

In 2006, brand name Belmonte which claimed to be Indian’s only mens wear provide full range of product was launched by SKNL.

In 2007, SKNL got licensed from Brand Stephens Brothers to introduced English style to serve Indian consumer.

In 2008, SKNL purchased assets from Italy named Legguino, the manufacturer and seller of cotton shirting. In the same it also entered in joint venture and licensing agreement with Donna Karan International to manufacture and sell DKNY mens wear, but which soon got terminated in 2012.

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[https://en.wikipedia.org/wiki/S.\\_Kumars](https://en.wikipedia.org/wiki/S._Kumars)

In 2009, SKNL acquired the exclusive rights of manufacturing and selling of premium brands such as Austin Reed, Ted Baker, Bobby Jones, Jack Nicklaus, Claiborne, Pierre Cardin, Lyle & Scott, Golden Bear and JAG Jeans along with the assets of a well known company Hartmax Corporation widely known for its stitching clothes for President Barack Obama.

Thus SKNL had global exposure of its textile business through aggressive expansion campaign.

### FROM RICHES TO RAGES

Nitin Kaliwal, the promoter of S Kumar Nationwide acquired riches till pinnacle by acquiring leading US brand Hartmax which was best known for dressing President Barack Obama in year 2009.

Everything was going well till 2012 when company planned to come up with initial offering for Reid & Taylor, it could not come out with the issue, as markets were bad. The situation became deteriorated due to subsequent slow down and cut down on amount spends by consumer on luxurious goods led to the downfall of the company .

Situation went from bad to worse when the financial institutions started invoking the pledged shares or selling them off in the market.

### LITERATURE REVIEW

**1. ODIPO, M., & SITATI, A. (n.d.). Evaluation of applicability of Altman's Revised model in prediction of financial distress: A case of companies quoted in Nairobi stock exchange.**

All the companies listed on Nairobi stock exchange from 1989 to 2008 consist of population of the study. Researcher has used Altman's Z score model for prediction taking the sample of failed and non-failed company and arrives at conclusion that 80% of the failed firms were correctly predicted and of the non-failed firms, 90% were correctly predicted.

**2. Vadivu, S. S., Mrs., & Mehalai, N. M., Mrs. (sep 2014). A Study on Financial Health of Select Indian Pharmaceutical Companies .Peer Reviewed International Journal,2(9), 2014th ser., 1-9.**

The objective of the study was to analyse the liquidity position and long term solvency position of the selected Indian Pharmaceutical firms for the period of 8 years from 2004-05 to 2011-12. The researcher had selected top five listed Bse Pharmaceutical Companies with equal

strength and size as sample. Financial ratio, Z score, Mean, Standard Deviation, Co-efficient of variation and CAGR have been used for analysis. The report provides an insight for the policy maker of the pharma Companies the way to move ahead in future.

**3. Pervan, I., Pervan, M., & Vukoja, B. (2011). Prediction of Company Bankruptcy Using Statistical Techniques- Case of Croatia. Croatian Operational Research Review,2, 158-167. Retrieved February 29, 2016.**

The purpose of this paper was to develop a model that would be useful for bankruptcy prediction using only publicly available information. For this the authors have decided to use a sample of differently sized bankrupted companies from manufacturing and retail trade industry. The bankruptcy sample data consist of 78 companies that have declared bankrupt in the official Gazette during 2010. As statistical methodology for bankruptcy prediction Discriminant analysis and Logistic Regression were used. The estimated model has shown that current liability, leverage and ratio of EBIT to total can be effectively used for bankruptcy prediction. The study concluded that Logistic regression model has greater accuracy compare to Discriminant analysis.

**4. Soon, N. K., Mohammed, Ahmad, A. R., & Tat, H. H. (n.d.). Applicability of Altman's Revised Model in predicting Financial Distress: A case of PN17 companies quoted in Malaysian Stock Exchange.**

The analysis of this study was made on a sample of 52 companies where these financial data were collected from the records over the period from 2003 to 2010. This study found that not all the PN17 companies are financial failure companies

### RESEARCH OBJECTIVES

The key objectives of this research paper is

1. To find out what goes wrong with S Kumar Nationwide that from stitching suits for Barack Obama to fighting court battle for survival.
2. To predict the financial distress of the company using two different technique.
3. To compare the model and to find out the best predictor model.

### SCOPE OF THE STUDY

The study is of S kumar Nationwide Ltd company. The duration of the study is prior one year of its sickness. The study is based on the

data collected from its financial statement and will be helpful to wide range of user.

### RESEARCH METHODOLOGY

The researcher has used descriptive research design. The data for the study have been collected through secondary source using respective company websites and financial statements and referring newspaper. The study confined only to predicting the financial distress of the company and factors that leads to distress.

### DATA ANALYSIS AND INTERPETATION

#### Financial Distress:

Financial distress is the situation whereby company faces problems in meeting its obligation on regular basis to different stakeholders. If this situation is not overcome it will leads to bankruptcy.

#### Causes of financial distress

1. Difficulty in obtaining finance
2. Working Capital growing faster than revenue
3. Loss of key customer
4. Increasing creditor pressure
5. Inability to pay tax
6. Poor Management

#### Multiple Discriminant Analysis:

Multiple Discriminant Analysis widely known as Z score was developed by New York University professor named as Edward I. Altman for predicting corporate failure. Financial ratios are used for computing financial ratio.

#### ESTIMATION OF Z-SCORE FORMULA

The Z score is a linear combination of four or five common business ratios, weighted by

coefficients. The coefficients were estimated by identifying a set of firms which had declared bankruptcy and then collecting a matched sample of the firms which had survived, with matching by the industry and approximate size<sup>2</sup> (assets). Altman applied the statistical method of discriminate analysis to a dataset of publically held manufacturers. Based on multiple discriminate Analyses, According to Altman, a company's Z score is a positive function of five factors<sup>(2)</sup>

$$Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5 \quad (8)$$

Where:

7.

X1 --- Net working capital to total assets (NWC/TA)\*100

X2--- Retained earnings to total assets (RE/TA)\*100

X3--- Operating Profit to total assets (ROI)

X4--- Book value of the equity to book value of total debt (MVE/TL).

X5--- Net sales to total assets of the company basically it is sales turnover of the company

Although the weights are not equal, the higher each ratio, higher the Z score lowers is the probability of bankruptcy.

Using the sample of 66 companies, 33 failed and 33 successful, Altman's model achieved an accuracy rate of 95%.

#### Z SCORE MEASUREMENT SCALE FOR MEASURING FINANCIAL HEALTH:

Altman after presenting his analysis of 66 companies recognized the following scale to measure financial distress of companies:

<sup>2</sup> ODIPO, M., & SITATI, A. (n.d.). Evaluation of applicability of Altman's Revised model in prediction of

financial distress: A case of companies quoted in Nairobi stock exchange.

Recommended Score	Interpretation (Sickness predicted)
Z Score More than 2.99	No danger of bankruptcy and company is financially safe & Sound.
Z score from 2.77 to 2.99	The company is on alert to work for betterment in terms of solvency of the company.
Z score from 1.80 to 2.77	It depicts signs of grey areas in the company. Company may go bankrupt within two years if no action or remedy is taken.
Z Score below 1.80	There is definite failure and closure of the company

**Ohlson’s O score model:**

The Ohlson O-Score for predicting bankruptcy is a multi-factor financial formula postulated in 1980 by Dr. James Ohlson of the New York University Ohlson model also known as nine factor linear combination used nine independent variable for predicting bankruptcy When using an O-Score to evaluate the probability of company’s failure, then

$$O - score = \frac{\exp(o - score)}{1 + \exp(O - score)} - 1.32 - 0.407 \log \left( \frac{TA_t}{GNP} \right) + 6.03 \left( \frac{TL_t}{TA_t} \right) - 1.43 \frac{WC_t}{TA_t} + 0.0757 \left( \frac{CL_t}{CA_t} \right) - 1.72X - 2.37 \frac{NI_t}{TA_t} - 1.83 \frac{FFO_t}{TL_t} + 0.285Y - 0.521 \frac{NI_t - NI_{t-1}}{|NI_t| + |NI_{t-1}|}$$

Where,

- TA= total Assets
- GNP= Gross National Product price level index
- TL= Total Liabilities
- WC= Working Capital
- CL= Current Liabilities
- CA= Current Assets
- X=1 if TL>TA, 0 otherwise
- NI= Net Income
- FFO= Funds from Operation
- Y= 1 if a Net Loss for the last two years, 0 otherwise

**Table 1: Ohlson O score Model**

NAME	S KUMAR NATIONWIDE
Total Assets	1,513.13
Gross National Product	104.22
Total Liability	1,513.13
Working Capital	642.44
Current Liability	477.83
Current Assets	1120.27
Net Income	99.77
Net Income(t-1)	-19.14
Net Loss	0
Funds from Operation	40.92
X( Total Liability > Total Assets)	0
Y ( 1 if net loss in last two years ,0 otherwise)	0
T	2.3194

**Table 2: Altman Z Score Model**

Name of the company	S KUMAR NATIONWIDE
EBIT	0
Total Assets	1,965.26
Net sales	1,229.54
Market Value of Equity	0
Total Liability	1,965.26
Current Assets	1,383.85
Current Liabilities	566.03
Retained earnings	210.33
Z-Score	1.118747

For Z – score, any result below 1.80 is definitely going to be default in two years. For O-score, any result larger than 0.5 suggests that the firm will default within two years. On analysing the two different models, the result shows that the company will default in two years and it has also defaulted also. It is found that Ohlson's O score model is significantly more accurate ( O score-2.31) as a predictor of financial distress compare to Z score (Z score – 1.12).

## CONCLUSION

From the study of predicting Financial Distress using Z score model and O score model of S Kumar Nationwide, it is concluded that both the method provides valuable information regarding the financial status of the company to its various stakeholders. But only limitation of the prediction model is that , none of the above method provides details regarding the variable which play an effective role in predicting financial distress.

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