

**KEYWORDS**: Z score, Capital Structure, Bankrupt.

# INTRODUCTION

Asian Paints Limited has experienced hasty growth and novelty since its inception. Depending on their current capacity and competence, they presume financial commitments and risks in fulfilling the necessities for future obligations. Insolvency is a general term used to describe a debtors legally declared inability to pay debts as they fall due (Smith, M., C. Graves, 2005). The solvency of a company corresponds to its ability to pay claims. Besides, (Jones, S. D.A. Hensher 2004) had specified the key features for minimum solvency requirements. For example, Asian Paints Limited must adopt a total balance sheet approach to identify the interdependence between assets, liabilities, regulatory solvency requirements for participants risk fund and the shareholders' funds. Insolvency problem may lead to the financial distress. An increase in financial distress has noticed from 1980s. Even though the achievement of the Asian Paints Limited has witnessed a significant increase in gross written contributions research studies, however, there is deficiency research done on Asian Paints Limited financial distress.

Therefore, it is essential to understand the concept of Asian Paints Limited financial distress by highlighting the feasibility of using financial ratios, capital structure and Altman Z-score as a method to detect Asian Paints Limited distress. The detection of financial distress can assist Asian Paints Limited operators to reduce the frequency of failures; thus, this averts the overall cost associate to insolvency or bankruptcy (Hernandez Tinoco, M., N. Wilson, 2013).

### **OBJECTIVES**

- To explain the use of capital structure specifically on debt ratio as a proxy of financial distress.
- To highlight the Altman Z-score as a method to predict financial distress

#### **RESEARCH METHODOLOGY**

In the present research the data is taken from the secondary sources. The information and data for the research can be collected through secondary sources i.e. published articles, journals, news papers, reports, books and websites. The profit & loss account and balance sheet of the Asian Paints Limited for the last ten years i.e. from 31<sup>st</sup> March 2008 to 31st March 2017 were studied to get the clear picture of the capital structure. The available data between these periods has been carefully analyzed, interpreted and presented by studying the capital structure of Asian Paints Limited. Commensurate with the objective of the study, Altman Z score method have been employed in order to arrive at certain conclusions regarding analysis of bankruptcy of Asian Paints Limited.

## **ASIAN PAINTS LIMITED - PROFILE**

Asian Paints Limited is an Indian multinational paint company headquartered in Mumbai, Maharashtra. The Company is engaged in the business of manufacturing, selling and distribution of paints, coatings, products related to home decor, bath fittings and providing of related services. Asian Paints is India's largest and Asia's fourth largest paints corporation. As of 2015, it has the largest market share with 54.1% in the Indian paint industry. Asian Paints is the holding company of Berger International.

#### LITERATURE REVIEW

**Zeytinoglu, E. and Y.D. Akarim, (2013)** Debt ratios or cash flows ratios can indicate the solvency and liquidity where higher ratio values can translate into lower distress risk. By measuring long-term debt for degree of financial leverage, future solvency problems can simply be identified even though the ratios tend to take a long-run approach.

**Radhakrishna**, **G.**, **(2012)** Financial distress is a condition where a company cannot meet nor has difficulty in paying off its current financial obligations due to the insufficient of working capital. Normally, firms might face one of two possible conflicts when they enter financial distress that is a cash shortage on the assets side of the balance sheet or a debt overhang in liabilities.

**Bokpin, G.A., 2009; Bokpin, G.A., A.C. Arko, (2009)** Debt ratio as a proxy of financial distress indicates the portion of leverage of the firms that has relation with their assets. Debt ratio has a significant positive correlation with risk and bank credit, and a significant negative correlation with short-term debt to equity, return on equity and return on assets.

Soekarno, S. and D.A. Azhari, Brockett, P.L., (2006) in their studies found that the solvency ratio must be significant because the ratios measure the company's financial risk by determining the amount of assets financed by debt.

## ALTMAN Z SCORE METHOD

This study attempted to use Altman Z-score as the main method to predict Asian Paints Limited financial distress. In 1968, Edward Altman, a financial economist and professor at New York's Stern School of Business, develop an Altman's Z (the Z-score) through a multiple discrete analysis (MDA). The Z-Score was originally constructed as:

Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5

Where;

- X1 = working capital per total assets
- X2 = retained earnings per total assets
- X3 = earnings before earnings and taxes per total assets
- X4 = market value of equity per book value of debt

X5 = sales per total assets

# Table 1: Calculation of Altman Z score method of Asian Paints Limited from 2008-2017.

Ratio definition	Ratio	Factor	Original	Z score
	value		value	value
Working capital / total assets	0.654958	X1	1.2	0.78595
Retained earnings / total assets	0.973994	X2	1.4	1.363592
Earnings before earnings and taxes / total assets	0.561641	X3	3.3	1.853415
Market value of equity / book value of debt	0.072289	X4	0.6	0.043374
Sales / total assets	2.985085	X5	1	2.985085
	Overall Z Score Value			1.406283
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# Figure 1: Altman Z score values of Asian Paints Limited from 2008 -2017.



#### **FINDINGS AND CONCLUSION**

The main objective of the study is to provide a basic understanding of the feasibility of using financial ratios, capital structure and Altman Zscore as an empirical approach to predict Asian Paints Limited financial distress. Sources of data collection will be obtained from ten Asian Paints Limited annual report such as from 2008 until 2017. According to Altman Z score for Asian Paints Limited for the year 2008 - 2017 is 1.40 that denotes that the company's risk is high in range. The company was in crisis zone and financially unsound. This is evidence for that very soon the company going bankrupt.

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