



## A Study on Financial Health of Asian Paints Using 'Z' Score Model

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### ABSTRACT

*The primary objective of a business undertaking is to earn profit. A business needs profit not only for its existence but also for expansion and diversification. A business can discharge its obligations to the various segments of the society only through earning profits. In this regard the researcher has probed to find answer for the following questions. Is there any improvement in profitability? & Whether there is efficiency in returns? It refers to the process of determining financial strength and weakness of the firm by establishing strategic relationship between the item of the balance sheet, profit and loss account. The increase in the wealth of the shareholders depends upon a target profit which can be achieved within a reasonable period of time. The easy way to gauge such a situation is by calculating the company's sustainable growth rate (SGR). A company's SGR is the maximum growth rate with the use of internally generated funds without changing its operating and financial policies. The profitability analysis seems to be satisfactory. The firm should take corrective measure to increase the profitability performance. Majority of the ratio are showing the efficiency of the management in dealing with finance. It also analysed that the SGR is greater than AGR which shows a maximum growth rate. Operating efficiency in the running routine business is satisfactory.*

### KEYWORDS:

### INTRODUCTION

Finance is more important to the business as the circulation of blood which is necessary for human body. Literally speaking, finance is the provision of adequate money when it is required. That is finance is needed for a business to promote, conduct and achieve the goal of organisation. For a new business finance is important for promoting a business and investment in fixed assets, market survey, implementation of business etc and for existing company finance is needed to improving, expanding, and innovating the business. For every company finance is much important right from the beginning that is conceiving an idea to obtain the organisational goals. Thus finance is very essential for the smooth running and survivability of the business.

The main aim of financial analysis is better understanding of firm's position and performance. It refers to the process of determining financial strength and weakness of the firm by establishing strategic relationship between the items of balance sheet and profit and loss account. To evaluate the financial conditions and performance of a company, the financial analysis needs certain yardsticks. Ratio analysis is a widely used tool, which is relevant in assessing the performance of a firm in respect of liquidity position, long term, and solvency. In addition to this, it helps to predict the financial distress of the business. An attempt has been made in the present study to have an insight into the examination of financial health of the organisation.

### NEED FOR THE STUDY

The main aim of financial analysis is better understanding of firm's position and performance. This study is conducted to assess the financial performance of the company and to know about the efficiency in financial operations. Monitoring the financial health of a company by checking its sales and profit growth is not sufficient today. It is necessary to predict the financial distress. Also the study is used to measure the financial health and viability of the company

### STATEMENT OF THE PROBLEM

The primary objective of business undertaking is to earn profit. Profit earning is considered essential for the survival of the business. Business needs profit not only for its existence but also for expansion and diversification. Monitoring the financial health of a company by checking its sales and profit growth is not sufficient today. It is necessary to benchmark the efficiency of utilisation of capital and assets, return to shareholders as well as predicting financial distress. Hence this study is conducted to evaluate the financial health of the company.

### OBJECTIVES OF THE STUDY

- To assess the financial performance of the company.

- To know the efficiency in financial operations.
- To predict the financial health and viability of the company.

### PERIOD OF THE STUDY

The analysis is done for the period of 10 years starting from 1st April 2001 to 31st March 2010.

### SCOPE OF THE STUDY

The study is conducted to evaluate the financial position of the company. The performance of ASIAN PAINTS Company is judged by its financial statements, which throws light on the operational efficiency and financial position of the company. The topic selected is a study on financial health using Z score model from the financial year 2001-2010.

### METHODOLOGY

The study was concerned with ASIAN PAINTS Company. The study was on the secondary data, which was obtained from the published sources for a period of 10 years from; 2001 to 2010. The collected data was analyzed with the help of ratio analysis. Accounting ratios were used to predict the financial performance of the company and also the Z score analysis has been adopted to monitor financial health of the company to predict as well as to avoid business failure and subsequent bankruptcy. In addition to that, the study used statistical tool like mean.

### PROFILE OF THE COMPANY

Asian Paints is India's largest paint company and Asia's third largest paint company, with a turnover of Rs 66.80 billion. The group has an enviable reputation in the corporate world for professionalism, fast track growth, and building shareholder equity. Asian Paints operates in 17 countries and has 23 paint manufacturing facilities in the world servicing consumers in over 65 countries. Besides Asian Paints, the group operates around the world through its subsidiaries Berger International Limited, Apco Coatings, SCIB Paints and Taubmans.

### ANALYSIS AND INTERPRETATION

The main objective of financial statement analysis is to spotlight the significant facts and relationships. Concerning managerial performance, corporate efficiency, strength and weakness and credit worthiness that would have otherwise seen buried in maze of detail.

### MEASURING FINANCIAL HEALTH THROUGH RATIO ANALYSIS

Ratio analysis is a widely used tool of financial analysis, with the help of the ratio analysis can know the strengths and weakness of a firm, as well as its performance and current financial position. Ratios are helpful for comparison. A single figure by itself has no meaning. But when

expressed in terms of related figures, it yields significant inferences.

For determining the financial health of a company, the financial analyst takes initial steps to analyze the company's financial statement. It provides a clear picture of the financial soundness of a business and provides a roadmap outlining the direction the business heading to. Financial ratios are analysis tools, applied to financial data, which are used to identify positive and negative trends, strengths and weakness, investment attributes, and other trends, which measure the viability of the business.

Ratio analysis is typically used to measure liquidity, leverage, activity, profitability and growth. No single ratio calculation can provide a meaningful complete picture of a company's financial position. Keeping the above point in mind, this study uses 'Z' score model, which captures the predictive viability of a company's financial health by using a combination of financial ratios that ultimately predicts score, which are used to determine the financial health of a company.

**'Z' SCORE MODEL**

About 40 years ago, Edward I, Altman, a financial economist at New York University's Graduate School of Business, developed a model for predicting the likelihood that a company would go bankrupt. This model uses five financial ratios that combine in a specific way to produce a single number. This number, called the Z= score, is a general measure of corporate financial health. The most famous failure prediction model is Altman's Z-Score Model. Based on Multiple Discriminate Analysis (MDA), the model predicts a company's financial health based on a discriminate function of the firm.

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

**'Z' score Ingredients**

Ingredients	Financial ratios	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Mean
X1	Working capital / total assets	0.34	0.13	0.11	-0.02	0.11	0.10	0.07	-0.02	0.12	-0.07	0.087
X2	Retained earnings / total sales	0.26	0.24	0.25	0.24	0.23	0.22	0.22	0.23	0.22	0.27	0.238
X3	EBIT / total assets	0.29	0.39	0.43	0.40	0.44	0.45	0.49	0.57	0.48	0.69	0.463
X4	Value equity/total debt	0.31	0.70	0.76	1.86	1.47	1.32	0.89	1.24	1.47	1.45	1.147
X5	Sales/total assets	2.11	2.88	2.94	3.09	3.22	3.52	3.47	3.57	3.89	3.31	3.20

**Table No 2**  
**Value of 'Z' score**

Source :( annual reports of ASIAN PAINTS)

Ingredients	Financial Ratios	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	Mean
X1	Working capital / total assets	0.408	0.156	0.132	-0.024	0.132	0.12	0.084	-0.024	0.144	-0.084	0.104
X2	Retained earnings / total sales	0.364	0.336	0.35	0.336	0.322	0.308	0.308	0.322	0.308	0.378	0.333
X3	EBIT / total assets	0.957	1.287	1.419	1.32	1.452	1.485	1.617	1.881	1.584	2.277	1.528
X4	Value equity/total debt	0.186	0.42	0.456	1.116	0.882	0.792	0.534	0.744	0.882	0.870	0.688
X5	Sale s/total assets	2.11	2.88	2.94	3.09	3.22	3.52	3.47	3.57	3.89	3.31	32.0
Z Score		4.025	5.079	5.297	5.838	6.008	6.225	6.013	6.493	6.808	6.751 34.653	

**Interpretation:**

This table reveals the 'Z' score value of ASIAN PAINTS. It shows that the 'Z' score value is highest in the year 2008-2009 as 6.808 and is lowest in the year 2000-2001. This indicates that the company is too healthy.

**FINDINGS OF THE STUDY**

- ❖ The working capital management of ASIAN PAINTS was satisfactory and not effective and sound in the next following years.
- ❖ Retained earnings to total sales ratios are fluctuating throughout the study period. The firm with high retained earnings to total assets have financed their assets through retention of profits and have not utilised as much debt.
- ❖ Reciprocal of debt equity ratio shows an increasing trend in the next following years. It shows the long term solvency of a firm.
- ❖ Sales to total asset ratio indicates a positive position in the following years. It shows that the companies have the capacity to increase their sales over periods but not to the desired level.
- ❖ With the help of 'Z' score model the financial health of ASIAN

Where:

Z = Discriminate function score of a firm

X1= Working Capital / total assets

X2= Retained earnings / total sales

X3= Earnings before interest and taxes / total assets

X4= Market value of equity / book value of total liabilities or reciprocal of debt- equity ratio,

X5=Sales / total assets.

The Z – score model (developed in 1968) was based on a sample composed of 66 manufacturing companies' with 33 companies in each of two matched pair groups. Altman subsequently developed a revised Z – score model (with revised co –efficient and Z- score cut – offs) which dropped variables X\$ and X5 (above) and replaced them with a new variable X4= net worth (book value) / total liabilities. The X5 variables were allegedly dropped to minimize potential industry effects related to assets turnover.

**ALTMAN GUIDELINES FOR HEALTHY ZONE**

With the help of Altman guidelines, the financial health can be measured.

**Altman Guidelines**

Situation	Z SCORE	Zones	Remarks
I	Below 1.8	Not Healthy	Its failure is certain and extremely likely and would occur probably within a period of two years.
II	Between 1.8 and 2.99	Healthy	Financial viability is considered healthy. The failure in this situation is uncertain to predict.
III	3.0 and above	Too healthy	Its financial health is viable and there is no risk of a fail.

Table No 1

PAINTS is measured as too healthy and it is viable and there is no risk of fail.

**CONCLUSION**

The financial healthiness of asian paints seems to be satisfactory and there is no risk of failure. The firm should take corrective overall measure to increase the financial performance. On the basis of ratio analysis and 'Z' SCORE MODEL, researcher can conclude that the company is too healthy and is financially viable. Majority of the ratio analysis are showing the efficiency of the management in dealing with finance.

**glossary**

Finance is more important to the business as the circulation of blood which is necessary for human body.

Ratio analysis is a widely used tool, which is relevant in assessing the performance of a firm in respect of liquidity position, long term, and solvency

Financial health of a company is done by checking its sales and profit growth is not sufficient today.

Review of literature is necessary since it familiarizes the researcher with concepts and conclusions already evolved by earlier analysis

The Z= score, is a general measure of corporate financial health. The most famous failure prediction model is Altman's Z-Score Model. Based on Multiple Discriminate Analysis (MDA), the model predicts a company's financial health based on a discriminate function of the firm.

Working capital is defined as the difference between current assets and current liabilities EBIT is a measure of the productivity of the firm's assets, independent of any tax advantage factors

#### **ABBREVIATIONS**

HCL High Level Commission

MDA Multiple Discriminate Analysis

EBIT Earnings before Interest and tax

#### **REFERENCES**

Arora and S Arora, "Statistical Methods", S Chand & Co New Delhi-2008 | Gitman L.J "principles of managerial Finance", Harper and Row New York, 1997 | Rustagi R.P," Financial Management", Galgotia Publishing Company, New Delhi, 2005 | Solomon E, "Theory of Financial Management", New York 1999 | Kulshetra N K "Management Accounting Concepts and Cases " Tata McCraw Hill Publications, New Delhi, 2009 | Sharma R K and K Shasi Gupta "Financial management" Kalyani Publishers, Ludhiana, New Delhi 2006 | I M Panday "Financial Management" 8th Edition, New Delhi, Vikas Publishing Pvt Ltd, 2009 | JOURNAL | Indian Journal of Finance, A study on Financial Health of Sugar industry using Z-score model , 2009 | WEBSITES | [www.asianpaints.co.in](http://www.asianpaints.co.in) | [www.aspt.com](http://www.aspt.com)