ORIGINAL RESEARCH PAPER

Commerce

COMPARATIVE ANALYSIS OF SELECTED FMCG COMPANY WITH SPECIAL REFERENCE TO USING Z SCORE MODEL

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ABSTRACT

The Fast-Moving Consumer Goods Is one of the most booming sectors of India. The FMCG sector has continuously grown in the past decade. The Fast-Moving Consumer Goods (FMCG) sector has a significant contribution to Indian GDP- Gross Domestic Product. This paper concentrated on comparative analysis of FMCG companies - Dabur& Colgate Palmolive. Author using Altman Z-score model to estimate financial stability and credit risk of the company. A main objective of this paper is to analyze the solvency and financial position of the company by using Altman Z-score. Altman's z score based on working capital, earnings before interest and tax (EBIT), retained earnings and total assets.

INTRODUCTION

FMCG products are those products which are quickly sold at low price hence profit from this product is too small and selling is on a large scale. In this sector Bankruptcy and unemployment are familiar headlines over the several years. Cash inflow is not sufficient as cash outflow hence companies demand creditors and lenders. Altman's z score is a very important tool for measuring financial stability and ability to face the financial distress of a particular company.

Review Of Literature

- A paper called "The Effect of Financial Ratio (Altman's Z-Score) on financial distress Prediction in the manufacturing sector in Indonesia 2016-2018" considers 3 years data of selected companies. Z score model used by researchers. A researcher concluded that 55 companies are in distress in 2016 and 2017, 56 companies are in distress in 2018.(Toly et al., 2020)
- This paper entitled "Evaluation of Financial Health of RCFL of India Through Z Score Model". This paper analyzes financial health of RCFL for ten years data from 200708 to 2016-2017. This paper concludes that Rashtriya Chemicals and Fertilizers Limited (RCFL) Z score ratio is 1.43 as it is lower than 3. It indicates that RCFL financial position is poor and its high possibility of bankruptcy. (Saini, 2018)
- A research paper entitled "Altman z score with reference to public sector Banks in India". This paper analyzes top 5 public sector banks prediction of bankruptcy using the Altman z score model for the period of 2012 to 2017. Researchers selected State Bank of India, Bank of Baroda, Punjab National Bank, Central Bank of India and IDBI Bank. This paper concludes that all 5 banks' z score ratio is greater than 3 as it indicates that banks are not going to go bankrupt as their financial position is good enough. (Agarwal, 2018)
- This paper is on "Prediction of financial distress using Altman z-score: a study of selected FMCG companies". A researcher selected 5 companies like Colgate Palmolive, Hindustan Unilever, Britannia limited, Emami and Godrej Consumer Product for the year of 2011 to 2015. This research paper concluded that all companies had good financial position.'(Bal, 2015)

Statement Of Problem

Bankruptcy is a symbol of deteriorated management, insufficient cash, sources is not utilized properly, decreased sales and under capitalization of the company. Forecast of bankruptcy is significant steps for taking the right measures and taking correct financial planning of the company. To predict bankruptcy, few financial ratios are calculated. Altman's z score model predicts the risk of bankruptcy of a company. With help of this model a researcher can find the financial health of the selected company.

Objective Of Study

Main object of this paper is to examine financial distress between selected FMCG Companies using Altman's z - score.

Research Methodology
Data Collection

This study is based on secondary data using annual report of selected FMCG companies

Sample Selection

Two Companies Selected By Researcher
1. Colgate Palmolive Ltd.
2. Dabur Ltd.

Period Of Study

This study covers 3 years of data of selected FMCG companies.

Tools For Analysis

Altman's z score model is used by researcher to identify financial distress of selected FMCG companies

Altman Z- Score

Altman's Z score developed by Edward Altman (1968). This is a bankruptcy prediction model. In the Z score model, we have used 5 ratios to predict financial stability of selected companies.

Below author mention 5 ratios used in z score model

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

Were,

$X1$ = Working capital/Total assets
$X2$ = Retained Earning/Total assets
$X3$ = Earnings before Interest and Tax/Total assets
$X4$ = Market Value of Equity/Total Liabilities
$X5$ = Sale/Total assets
Z = Discriminate Score
Z score model classified probability of bankruptcy into 3 categories
1. If z score is less than 1.87 then unit has high risk of bankruptcy
2. If z score is between 1.81 to 2.99 then it has uncertain risk for unit of bankruptcy
3. If z score is greater than 2.99 then unit is in safe zone as it is very low risk for bankruptcy

Analysis And Interpretation
Table 1: Calculation Of Average Of FMCG Selected Companies Of Selected Components

Particular / Year	Colgate Palmolive Ltd.				Dabur Ltd.			
	2022	2021	2020	Average	2022	2021	2020	Average
Working capital	400.39	-245.37	141.73	98.92	326.33	793.59	1823.34	981.09
Retained Earning	1707.48	1139.04	1567.63	1471.38	5687.08	5214.48	4397.52	5099.69
Earning before Interest and Tax	1414.9	1357.5	1053	1275.12	1914.98	1692.45	1527.74	1711.72
Market Value of Equity	62.25	71.92	73.29	69	11.86	13.78	12.9	13
Sale	5099.78	4841.22	4525.08	4822.03	8179.5	7461.38	6586.7	7409.19
Total assets	2901.83	2894.01	2603.97	2799.94	8592	7504.16	6100.11	7398.76
Total Liabilities	1167.15	1728.15	1009.81	1301.7	2728.13	2112.94	1525.88	2122.32

Table 1 shows working capital, retain earning, earnings before interest and tax, market value of equity, sale total assets and total liability of selected FMCG companies and found average of three years 2020 to 2022.

Table 2: Z Score X Component Calculation

Particular / Company Name	X1= Working capital/ Total Assets	X2= Retained Earning/ Total assets	X3=EBIT / Total assets	X4=Market Value of Equity/ Total Liabilities	X5= Sale/ Total Assets
Colgate Palmolive Ltd.	0.035	0.526	0.455	0.05	1.72
Dabur Ltd.	0.133	0.689	0.231	0.01	1

Table 2 shows calculation of Z score components which is combination of 2 variables

Z Score Financial Health & Z Score Discrimination
The Z score model is used for prediction of the financial position of bankruptcy of a particular unit. Here a researcher finds financial health and z score discrimination. Colgate Palmolive Ltd has a ratio of 4.03 which is considered a safe zone of financial situation and dabur has 2.89 which is considered a gray zone of financial situation. Both companies are strong as their own criteria. A researcher analyzes that both companies' financial position is good and there are less chances of bankruptcy.

CONCLUSION
Altman's Z score model is reliable and the main reason for this model durability is that calculating five measures represent Liquidity, Profitability, Productivity, Efficiency and Leverage. Ratios help to predict the future of corporate financial health and help management to make decisions for the company. The Z score model predicts the trend of a particular company and that evaluation helps in the initial stage to ignore financial distress and Bankruptcy. In this paper a researcher found a discrimination between two companies. Colgate Palmolive ratio is 4.03 as it has a cross limit of gray zone hence Colgate company is in safe zone. It utilized their working capital and managed profit properly. Dabur has a 2.89 ratio which is considered in the gray zone. Gray zones consider an average risk of bankruptcy. Colgate has a financially strong status. Investors have to use the z score model before investing their money in a particular company.

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