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An Analytical Study on Financial Stability and Working Capital Management of Kamdhenu Group

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Abstract: *Working capital is the money a business has on hand, like cash, marketable securities, inventories, and receivables. Better payables and fewer inventories and receivables give businesses a competitive edge. This is because they manage their working capital well. It is hard to optimize when many companies don't have a common strategy for managing their working capital. This essay talks about how important it is for businesses to manage their working capital well and how it affects their overall financial performance. The Altman Z-Score test is a statistical method that looks at a company's financial data to see how likely it is to go bankrupt. This statistical method is used to observe the company's financial health and the risk of bankruptcy. The study's goal is to give a full picture of Kamdhenu Group's working capital management and what it means for long-term financial stability by using both ratio analysis and Z-Score interpretation.*

Key Words: *Working capital, Circulating capital, Short-term assets, corporate financial performance, working capital, kamdhenu group, ratios.*

1. INTRODUCTION:

It is impossible to overstate how important it is to manage working capital well because bad or ineffective management of current assets and liabilities can lead to operational bottlenecks, liquidity crises, and even bankruptcy. Modern financial strategy puts more emphasis on the need for flexible working capital practices to stay competitive in a business world that is changing quickly. Traditional financial management, on the other hand, has mostly focused on long-term financing and investment decisions.

Managing working capital has a direct effect on a company's liquidity, operational effectiveness, and overall financial health, and it talks about how to handle a company's short-term assets and liabilities, like cash, inventory, payables, and receivables, in a way that makes sure the business has enough money to meet its short-term obligations while also making as much money as possible. The Kamdhenu Group is one of the leading steel manufacturing companies in India, which was initially established as a single factory in the year 1995 in Bhiwadi, Rajasthan. In present scenario the company has become one of the leading steel producers in the country, with over 50 production facilities across the country including paints, plywood, color-coated sheets, binding wire, structural steels, and reinforcing steel bars are just a few of the many products offered by the Kamdhenu Group. With the aim of growing together, the organization has advanced quickly from being among the best to among the greatest. The founders' perseverance and hard work are what made the company successful. Since its establishment, the Kamdhenu Group, a well-known name in India's steel and infrastructure sectors, has grown significantly. Effective working capital management is crucial for a manufacturing business like Kamdhenu, where cash is frequently trapped in receivables and inventory. Understanding the working capital structure of the business will improve your comprehension of its operational and financial stability.

2. LITERATURE REVIEW:

Trivedi, J.(2015):- The management of cash requirements during the production of goods from raw materials and the cash received from the sale of goods to consumers is referred to as working capital. To determine whether a chosen group of cement companies were well-managed or poorly managed in terms of working capital, a discriminant analysis was carried out between 2007 and 2010. The ratios of monthly net working capital to monthly operating working capital and monthly net working capital to monthly sales were employed as predictor variables. All predictors accounted for at least 40% of the between-group variability, and the discriminate function showed a significant

association between groups. Significant mean differences were also seen across all predictors. The 'jack-knife' classification showed that over 84% of the companies were correctly classified across the time horizon.

Mohsin Khan (July 2017):- Working capital management is crucial for corporate finance and the manufacturing sector since it directly affects a company's liquidity and profitability, which plays a major role in managing existing accountability and wealth. Working capital can be categorized as either gross or net; can be identified as qualitative or quantitative. In an initial study, Altman's Z-Score was used to assess the working capital management efficacy of 14 Indian food processing companies listed on the National Stock Exchange (NSE) over a five-year period. The report found that most companies were in a risk zone because they couldn't keep their liquidity ratios stable.

Sawarni, K.S., Narayanasamy, S., Chattopadhyay, S. and Chakrabarti, P. (2022):- This study examines the impact of firms growing at a high average rate on their working capital management (WCM) efficiency and its relationship with financial performance. The researchers analyzed the efficiency of 431 nonfinancial firms from 2012 to 2019 and used fixed effect regression to examine the impact of cash conversion cycle, inventory days, accounts receivable days, and accounts payable days on financial performance. The results showed that above median growth (AMG) firms manage their working capital more efficiently than below median growth (BMG) firms. WCM efficiency positively impacts profitability and valuation of firms, but this relationship is more intense for firms growing at a high rate. The research contributes to the less researched area of WCM by examining the effect of growth on the relationship between WCM efficiency and performance. Its findings may be helpful to professionals or managers in order to understand WCM efficiency which crucial factor for their companies' financial performance.

3. OBJECTIVES:

To evaluate the efficiency of working capital management at Kamdhenu Group

4. RESEARCH METHODOLOGY:

This study evaluates the efficiency of working capital management at Kamdhenu Group using a quantitative and analytical approach. The research focuses on financial ratio analysis and insolvency prediction using the Altman Z-Score model. The data collected from Kamdhenu Group's annual reports, financial statements, industry reports, academic journals, and company websites is analyzed over five financial years from 2020-21 to 2024-25. Historical data from 2013-14 to 2019-20 is used for Z-score calculation to assess solvency trends. Tools and techniques used include Current Ratio, Quick Ratio, Inventory Turnover Ratio, Debtors Turnover Ratio, Days Inventory Outstanding (DIO), and Days Sales Outstanding (DSO). **Edward Altman's Z-Score Model** is one of the best known, statistically derived predictive models used to forecast a firm's impending bankruptcy. The formula used for private firm is:

$$Z=0.717(X1) +0.847(X2) +3.107(X3) +0.420(X4) +0.998(X5)$$

The numbers that are multiplied by the variables in the Altman's Z-score formula and also known as coefficients or weights and are statistically derived values as per Table -1:

Table: 1

Variable	Coefficient	Meaning
X1 (Working Capital / Total Assets)	0.717	Moderate impact and evaluates short-term liquidity.
X2 (Retained Earnings / Total Assets)	0.847	Impact is moderate and represents the total profitability over time.
X3 (EBIT / Total Assets)	3.107	Most important impact and shows the efficiency of operations.
X4 (Capital Fund / Total Liabilities)	0.420	Fewer effect and demonstrate leverage or solvency.
X5 (Sales / Total Assets)	0.998	Significant effect and evaluates the efficiency and turnover of assets.

Source: https://tinyurl.com/ssrn2896387

The **coefficients show how much each financial factor matters** in predicting bankruptcy risk. Here is the **Z-Score Interpretation for Private companies:**

- Z > 2.90 → Safe Zone: Low risk of bankruptcy.
- < Z < 2.90 → Grey Zone: Medium risk; caution needed.
- Z < 1.23 → Distress Zone: High probability of bankruptcy.

The collected data is tabulated and analyzed using trend analysis over the selected years, comparative ratio analysis, and Z-score interpretation to determine financial stability and risk of insolvency. This analytical approach helps assess the trends and efficiency of working capital management and evaluates the financial health of the company.

5. ANALYSIS & DISCUSSIONS :

Financial management is that management activity that is concerned with the planning and controlling of a firm's financial resources, as Finance is very crucial parts of every organization. The four important managerial finance functions are investment decisions, financing, dividends, and liquidity decisions. Kamdhenu Limited's authorized share capital is Rs. 46,30,00,000, divided into 34,80,00,000 equity shares with a face value of Re 1 each. The company issued 1,28,00,000 equity shares at a price of Rs. 25 each in its initial public offering. The company also acquired 1,80,000 equity shares of a franchisee unit at a price of Rs. 651 per share, aggregating to Rs. 11.72 crore.

Statement of Changes in Working Capital:

- Current Assets are resources which are in cash or will soon be converted into cash in "the ordinary course of business".
- Current liabilities are commitments that are due for payment in the usual operating cycle of a business.

Table.2.Statement of Changes in Working Capital (Rs in crore)

Year	Current Assets	Current liabilities	Networking capital	Increase	Decrease
2020-21	323.04	211.92	111.12	-	-
2021-22	330.22	188.15	142.07	30.95	-
2022-23	143.40	29.50	113.90	-	28.17-
2023-24	211.84	34.75	177.90	63.19	-
2024-25	277.31	39.02	238.29	61.20	-

Source: Calculated Data

The working capital management of Kamdhenu Group is improving and growing from 2020–21 to 2024–25, despite a slight decline in 2022–23. The company seems to have bounced back nicely and is keeping healthy cash position, which is essential for both financial stability and operational effectiveness.

***Z- Score Analysis*:**

1. **Liquidity Test:** One characteristic that indicates the capacity to settle debts on time is short-term solvency, also referred to as liquidity. Liquidity ratios evalutes how effectively a company can meet its immediate financial commitments. Current liabilities are used as the denominator of the ratios because they are considered the most urgent debt and must be settled within a year, or more precisely, within an operational cycle.

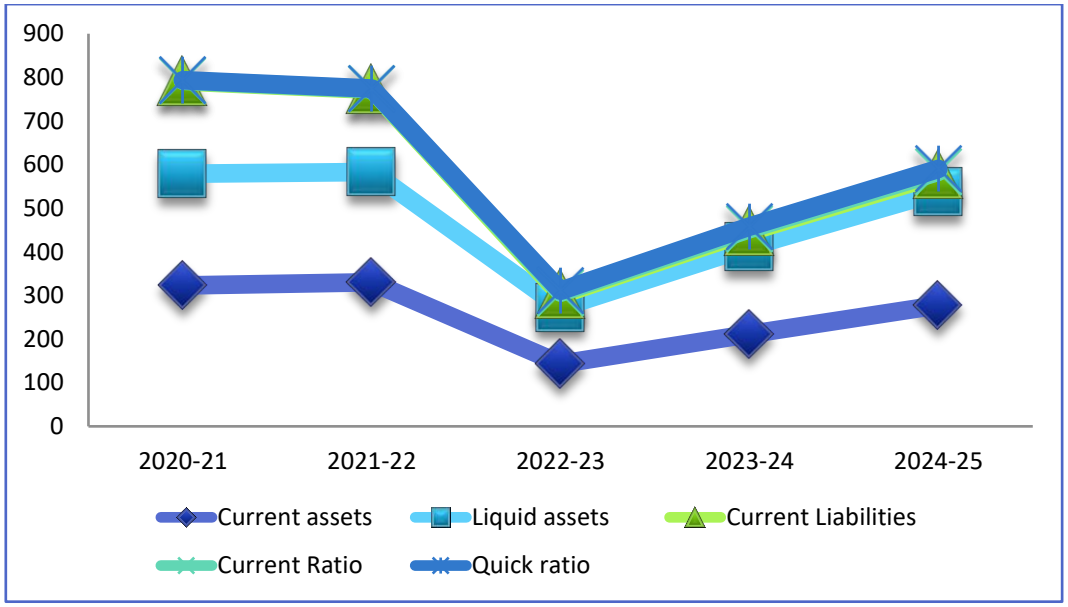
Table.3. Liquidity Test (Rs.in.crore)

Year	Current assets	Liquid assets	Current Liabilities	Current Ratio	Quick ratio
2020-21	323.04	255.75	211.92	1.52	1.21
2021-22	330.22	252.79	188.15	1.76	1.34
2022-23	143.40	128.79	29.50	4.86	4.37
2023-24	211.84	199.81	34.75	6.10	5.75
2024-25	277.31	260.16	39.02	7.11	6.67

Source: Calculated Data

Better short-term financial health and liquidity are shown by the steady upward trend of the current ratio and quick ratio. They were moderate in 2020–21 and 2021–22, but from 2022–23 they sharply increased, reaching their peak in 2024–25. Strong short-term solvency and more liquid assets in relation to short-term liabilities are suggested by this, but it may also point to working capital underutilization or over conservatism. The majority of current assets are liquid, according to the Quick Ratio.

Graph.1. Graphical presentation of Liquidity Test for Current Assets, Liquid Assets and Current Liabilities



Graph. 2. Graphical presentation of Liquidity Test for Current Ratio and Quick Ratio

2. Working Capital Investment Efficiency Test:

Given that inventory and accounts receivable make up a significant portion of current assets, evaluating the effectiveness of working capital investment is essential for supporting liquidity analysis; sometimes it may block the proprietor's fund. A blockage occurs when money becomes tied up in slow paying debtors, or in slow moving stock. In such a case, the business may appear to have a satisfactory amount of working capital but little or to liquidity. The common working capital investment efficiency ratios are:-

- Inventory turnover Ratio = Cost of sales / Inventory
- Days inventory outstanding = 365 / Inventory turnover ratio
- Debtors turnover ratio = Sales / Debtors
- Days sales outstanding = 365 / Debtors turnover ratio

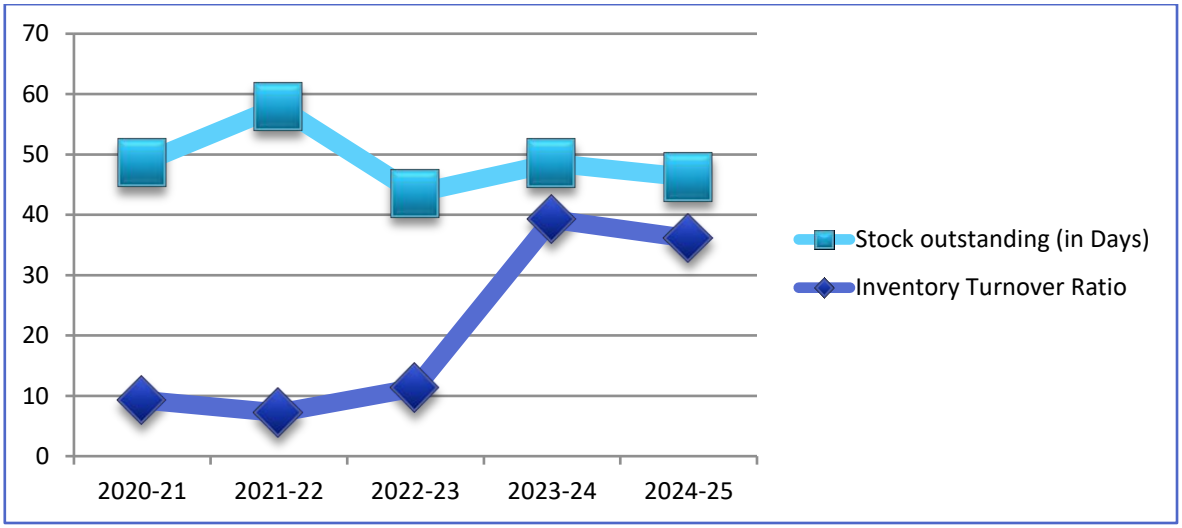
Table .4. Working Capital Investment Efficiency Test

Year	Inventory Turnover Ratio	Stock outstanding (in Days)	Debtors turnover ratio	Sales outstanding (in Days)
2020-21	9.29	39.29	3.14	116.24
2021-22	7.19	50.76	4.24	86.08
2022-23	11.33	32.22	8.92	40.91
2023-24	39.22	9.31	13.29	27.48
2024-25	36.08	10.12	16.73	21.28

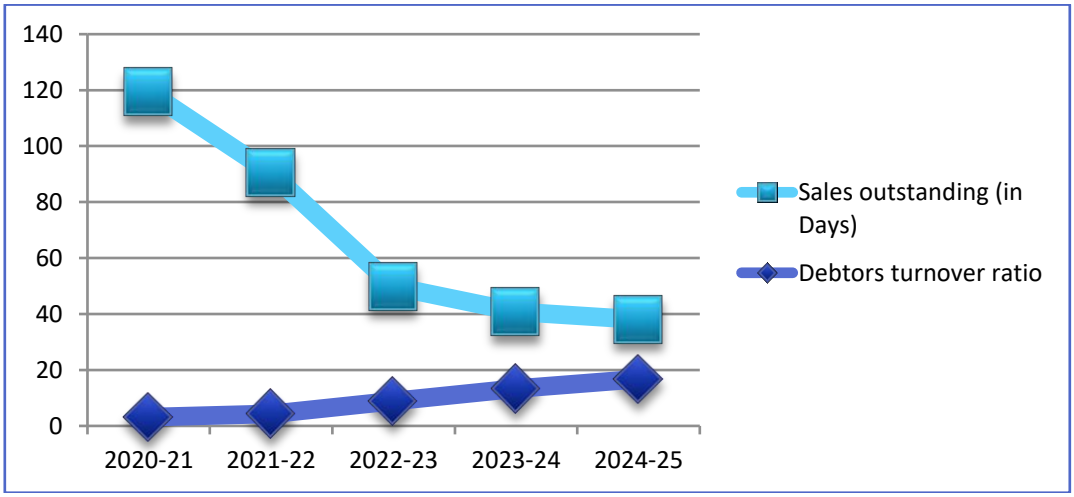
Source: Calculated Data

Over the previous five years, the Kamdhenu Group has shown a notable improvement in working capital efficiency. Effective inventory management is demonstrated by the Inventory Turnover Ratio, which rose from 7.19 in 2021–2022 to 36.08 in 2024–2025. Days Stock Outstanding has decreased as a result, suggesting a quicker conversion of inventory into sales. Days Sales Outstanding have significantly decreased as a result of the Debtors Turnover Ratio's growth, which suggests improved credit control, quicker recovery of accounts receivable, and more robust cash flow management. The goal of assessing working capital efficiency is in line with this increase in efficiency.

Graph .3. Working Capital Efficiency Test showing Inventory Turnover Ratio and Day Stock Outstanding



Graph .4. Working Capital Efficiency Test showing Debtors Turnover Ratio and Day Sales Outstanding



3. Solvency Test

Rather than searching for a single best ratio, Prof. Edward Altman has built a new model that distills five key performance ratios into a single score called z-score which gives investors a pretty good snapshot of a firm's financial health. The model uses five ratios to consider both financial problems (XI, X2, & X4) and operating problems (X3 &X5) of the firms. He has used multiple decrement analysis weight age used for the different ratios, which are:

- X1 = (Working capital / Total assets) x 0.717
- X2 = (Retained earnings / Total assets) x 0.847
- X3 = (EBIT/Total assets) x 3.107
- X4 = (Capital fund / Total Liabilities) x 0.420 and
- X 5 = (Sales / Total assets) x 0.998

The final z-score is calculated as:

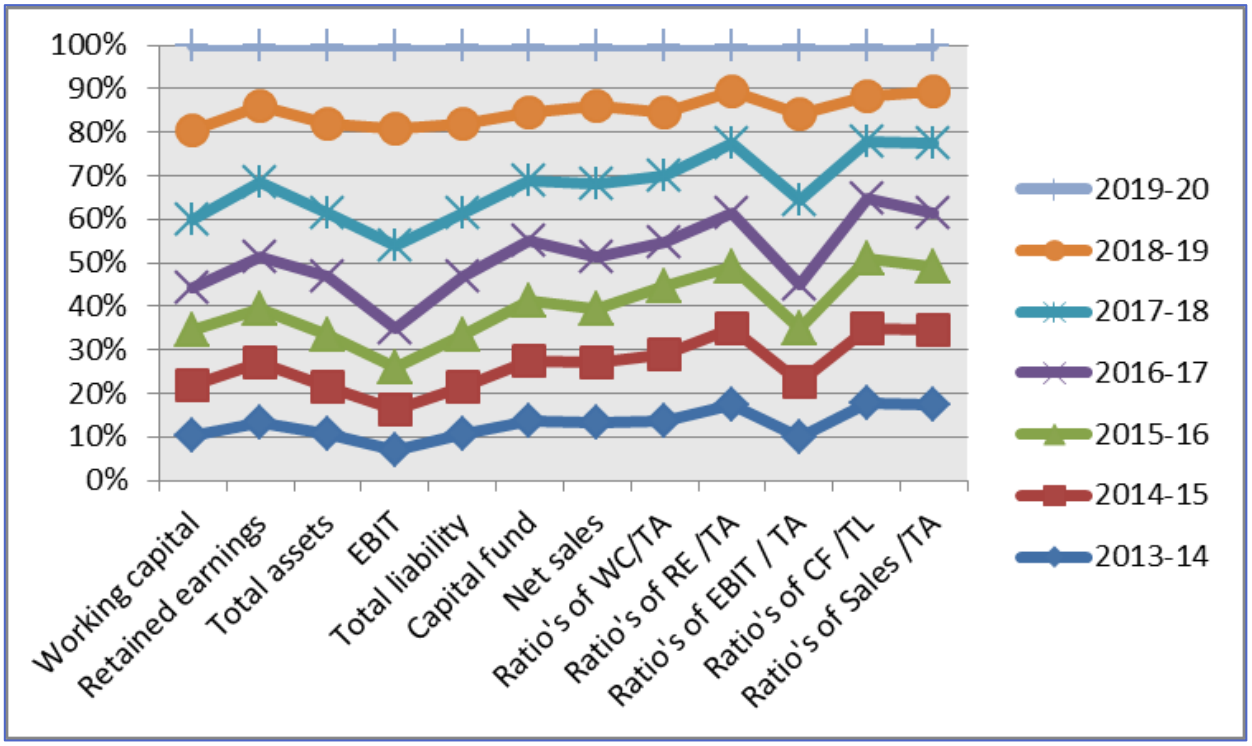
i.e., **Z= X1 + X2 + X3 + X4 + X5**

Table .5. Z- Score Analysis (Rs.in crores)

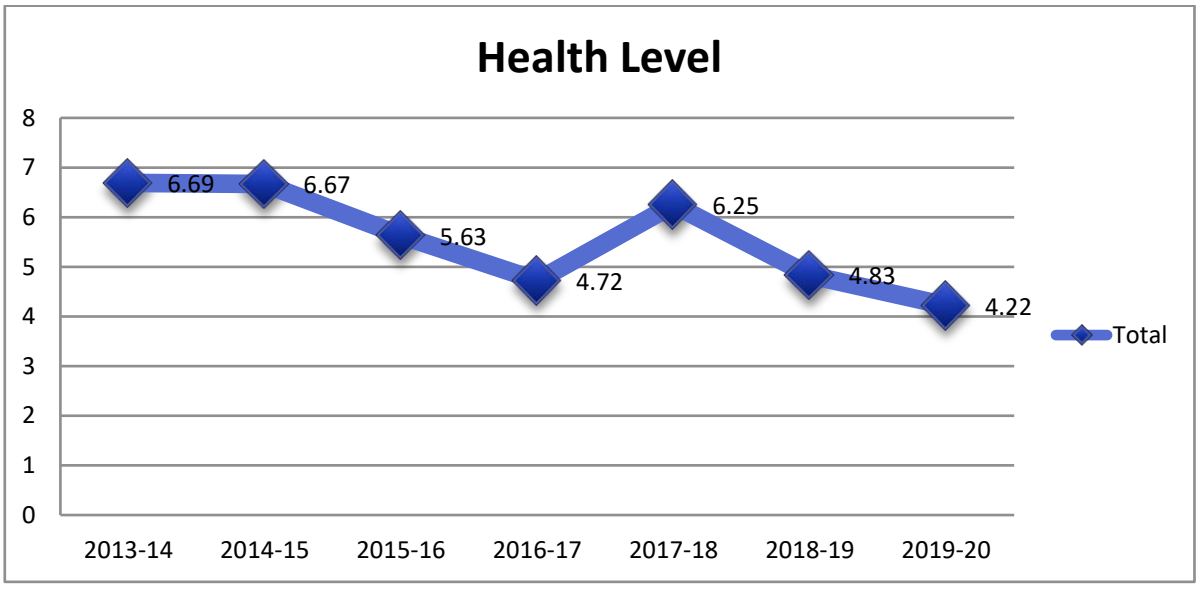
Detail / Year	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
Working capital	52.27	60.70	64.96	49.97	81.32	104.72	100.86
Retained earnings	944.75	991.01	864.11	847.72	1202.43	1255.42	987.73
Total assets	268.78	283.39	295.99	343.75	374.92	515.14	464.05
EBIT	9.23	11.90	12.49	11.73	24.41	34.95	24.74
Total liability	268.78	283.39	295.99	343.75	374.92	515.14	464.05
Capital fund	23.40	23.40	23.40	23.40	23.40	26.40	26.54
Net sales	921.71	967.99	841.19	824.87	1179.77	1232.40	961.96
Ratio's of WC/TA	0.1944	0.2142	0.2196	0.1453	0.2170	0.2033	0.2173
Ratio's of RE /TA	3.5160	3.4982	2.9217	2.4664	3.2084	2.4370	2.1284
Ratio's of EBIT / TA	0.0343	0.0420	0.0422	0.0341	0.0649	0.0678	0.0533
Ratio's of CF /TL	0.0871	0.0826	0.0791	0.0681	0.0623	0.0513	0.0572
Ratio's of Sales /TA	3.4294	3.4165	2.8446	2.3997	3.1473	2.3927	2.0726
X1	0.14	0.15	0.16	0.10	0.16	0.15	0.16
X2	2.98	2.96	2.47	2.09	2.72	2.06	1.80
X3	0.11	0.13	0.13	0.11	0.20	0.21	0.17
X4	0.04	0.03	0.03	0.03	0.03	0.02	0.02
X5	3.42	3.40	2.84	2.39	3.14	2.39	2.07
Total	6.69	6.67	5.63	4.72	6.25	4.83	4.22

Source: Calculated Data

Graph.5. Z-Score Analysis, the five ratios are indicated above which the following parts of the Z score table are can be worked out as follows:



Graph.6. Altman Z-Score showing key indicator of potential insolvency.



The Z-Score trends from 2013–14 to 2019–20 demonstrated strong financial health. All financial ratios calculated above are important variable trends. Perpetually, high Z-Scores indicate a low risk of bankruptcy. Retained earnings and sales efficiency are important considerations. Consistent debt management and financial stability are demonstrated by capital structure.

6. CONCLUSION:

The study examines Kamdhenu Group's working capital management practices and financial stability using financial ratio analysis and the Altman Z-Score model. The results show that Kamdhenu Group has maintained strong liquidity, solvency, and operational efficiency throughout the study period. Key ratios such as current ratio, quick ratio,

inventory turnover ratio, and debtor turnover ratio show Kamdhenu Group has effectively managed short-term obligations and optimized the use of current assets. The declining values of Days Inventory Outstanding and Days Sales Outstanding indicate better inventory and credit control practices, contributing to robust cash flow management. The Altman Z-Score analysis from 2013-2014 to 2019-20 consistently placed Kamdhenu Group in the "Safe Zone," indicating a low probability of bankruptcy and confirming financial resilience. Kamdhenu Group's strong retained earnings, sound EBIT performance, stable capital structure, and efficient asset utilization further reinforce its financial soundness.

7. LIMITATIONS:

- The study is based solely on secondary data, which may not fully reflect real-time operational dynamics.
- It considers historical data, which may not capture current economic or industry-specific changes.
- The Z-score model was originally designed for manufacturing firms in developed economies and may not fully account for local market conditions.

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