

Altman’s Z-Score Analysis Report: Avenue Supermarts Ltd (D-Mart)

Overview

Altman’s Z-Score is a financial tool designed to assess a company's probability of bankruptcy. Developed by Edward Altman, this model uses five key financial ratios to determine a composite score that signals whether a firm is in a **Safe**, **Grey**, or **Distress** zone.

This report evaluates the Z-Score of **Avenue Supermarts Ltd** over three financial years (2021–2023) to assess trends in financial stability and risk exposure.

Altman’s Z-Score Model

The formula for the Z-Score (for public manufacturing companies) is:

$$Z = 1.2A + 1.4B + 3.3C + 0.6D + 1.0E$$

Where:

- A** = Working Capital / Total Assets (Liquidity)
- B** = Retained Earnings / Total Assets (Cumulative Profitability)
- C** = EBIT / Total Assets (Operating Efficiency)
- D** = Market Capitalization / Total Liabilities (Leverage & Solvency)
- E** = Sales / Total Assets (Asset Turnover)

Interpretation Range:

Z-Score	Financial Condition
> 2.99	Safe Zone
1.81 – 2.99	Grey Zone
< 1.81	Distress Zone

Calculation of Altman's Z-Score for Avenue Supermarts Ltd

Below is the calculation of Altman's Z-Score for Avenue Supermarts Ltd for the years 2021, 2022, and 2023:

Altman's Z Score Analysis Calculation - AVENUE SUPERMARTS LTD			
Working Capital / Total Assets			
	Mar-13	2022	2023
Working Capital	17022.00	9121.00	-4461.00
Total Assets	181,476.0	197,205.0	226,501.0
Working Capital / Total Assets (A)	0.09	0.05	-0.02
Retained Earnings / Total Assets			
	2021	2022	2023
Retained Earnings	103,394.0	125,656.0	118,353.0
Total Assets	181,476.0	197,205.0	226,501.0
Retained Earnings / Total Assets (B)	0.57	0.64	0.52
EBIT / Total Assets			
	2021	2022	2023
EBIT	25,602.0	35,967.0	3,267.0
Total Assets	181,476.0	197,205.0	226,501.0
EBIT/Total Assets (C)	0.14	0.18	0.01
Market Cap / Total Liabilities			
	2021	2022	2023
Market Cap	223,000.0	294,000.0	207,000.0
Total Liabilities	104,013.0	101,288.0	137,213.0
Market Cap / Long term Liabilities (D)	2.14	2.90	1.51
Sales / Total Assets			
	2021	2022	2023
Total Sales	81,288.0	100,330.0	58,496.0
Total Assets	181,476.0	197,205.0	226,501.0
Return on Asset (E)	0.45	0.51	0.26
Altman's Z Score			
	2021	2022	2023
Final Score	3.11	3.80	1.92
Financial Stability	Strong	Strong	Grey Zone

Interpretation & Insights

2021–2022: Strong Financial Health

The company demonstrated consistent strength with Z-scores above 3. Key drivers included high retained earnings, strong EBIT relative to assets, and favorable market capitalization. This placed Avenue Supermarts Ltd firmly in the **Safe Zone**.

2023: Entry into Grey Zone

The Z-score dropped to **1.92**, reflecting increased financial vulnerability. Key contributing factors:

- **Negative working capital** (–₹4,461 Cr), leading to liquidity concerns.
- **EBIT collapse** from ₹35,967 Cr to ₹3,267 Cr, causing sharp decline in operational efficiency.
- **Market Cap decline** coupled with increased liabilities lowered the leverage ratio (D).
- **Sales-to-assets ratio** also declined, reducing asset utilization efficiency.

Conclusion & Recommendation

While Avenue Supermarts Ltd exhibited strong financial health in FY21 and FY22, the company's entry into the **Grey Zone in FY23** is a signal for cautious monitoring. Deteriorating liquidity, operating profitability, and investor confidence highlight the need for strategic corrective action.

To maintain financial resilience, the company should:

- Rebuild operating margins and EBIT.
- Improve working capital management.
- Stabilize debt levels relative to market value.

Altman's Z-Score remains a vital early warning system. In the case of Avenue Supermarts Ltd, FY23 serves as a **financial inflection point** warranting both internal review and investor awareness.