NORTH SOUTH UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS

Financial Analysis of Meghna Cement Mills Ltd & Aramit Cement Ltd

Course: Fin440; **Section:** 10

Spring 2023

Submitted To

Mr. Syed Asif Hossain

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NORTH SOUTH UNIVERSITY

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Date of Submission

12 April, 2023

Letter of Transmittal

Date:12-04-2023

Syed Asif Hossain

Department of Accounting and Finance

North-South University.

Subject: Letter of transmittal

Dear Sir,

We are pleased to inform you that we have completed the project assigned to us for FIN 440, Corporate Finance. The paper includes all ratio analyses, interpretations, future prediction and performance comparisons between Meghna Cement Mills Ltd and Aramit Cement Ltd. These two companies are well-known in the cement industry, and their goal is to become the industry's leader in the near future. In order to make an objective assessment, we did our best to thoroughly research the concept and its evolution in terms of cause and effect.

We are grateful to you for providing us with the opportunity to apply our textual knowledge to a real-world scenario. We hope you receive this report in good health and spirit, in accordance with the appropriateness of your requirements.

Finally, we would like to express our regret for any flaws or limitations that may have been reflected in our group work, and we would welcome your suggestions to make our findings more meaningful and equitable.

Regards,

Md. Mahabubur Rhaman Rohan

Ali Masrur

Gm Ohee

Saikat Hossen Munna

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Executive Summary

This report provides a detailed analysis of the financial performance and ratios of Meghna Cement Mills Ltd and Aramit Cement Ltd over a four-year period, using financial statements from 2019 to 2022. The report aims to provide insights into the financial health of these companies, highlighting their strengths and weaknesses.

To achieve this, the report employs a range of financial analysis techniques, including ratio analysis, trend/time-series analysis, and peer group/cross-sectional analysis. The ratios analysed include receivable ratios, coverage ratios, asset efficiency ratios, and long-term solvency ratios, among others. The report interprets and compares these ratios for both companies, identifying areas of outperformance and areas for improvement.

The report also includes pro-forma statements for three years, projecting the financial performance of both companies based on past trends and growth drivers. The pro-forma statements calculate sales growth and describe which expenses, assets, liabilities, and owner's equity will increase or remain constant and why. EFN is calculated for each year, and the debt-to-equity ratio is adjusted accordingly. Cash flow is computed based on the pro-forma statements.

Overall, this report provides a comprehensive overview of both companies' financial performance, offering valuable insights for investors, managers, and other stakeholders. It provides an in-depth analysis of financial ratios and other financial indicators, offering a detailed understanding of each company's financial position. The report concludes with recommendations for Meghna Cement Mills Ltd based on the analysis, helping the company improve its financial performance and achieve its long-term objectives.

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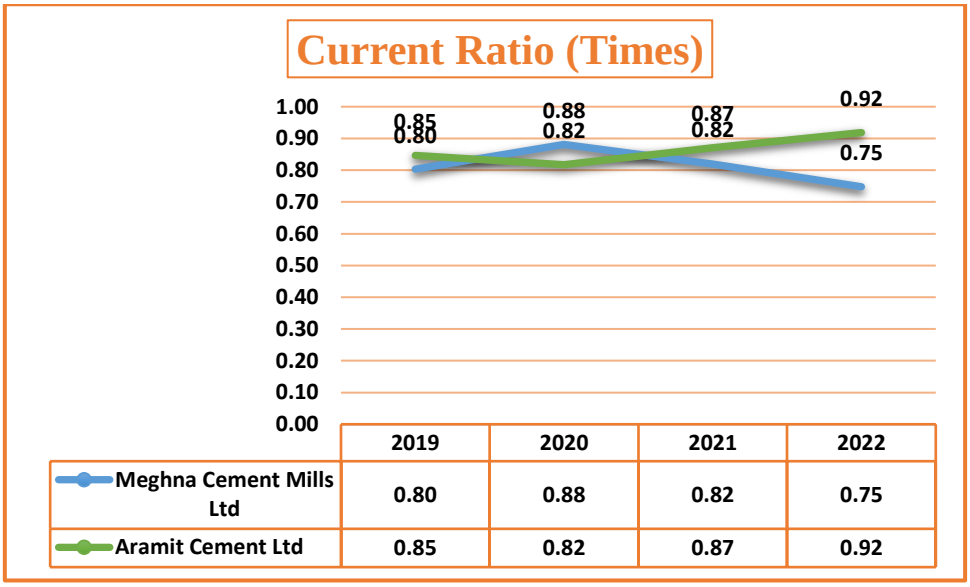
Ratio Analysis

Liquidity Ratios

Current Ratio

Current ratio measures the company's ability to pay current lability and current assets. A higher current ratio indicates better liquidity.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	0.80	0.88	0.82	0.75
Aramit Cement Ltd	0.85	0.82	0.87	0.92

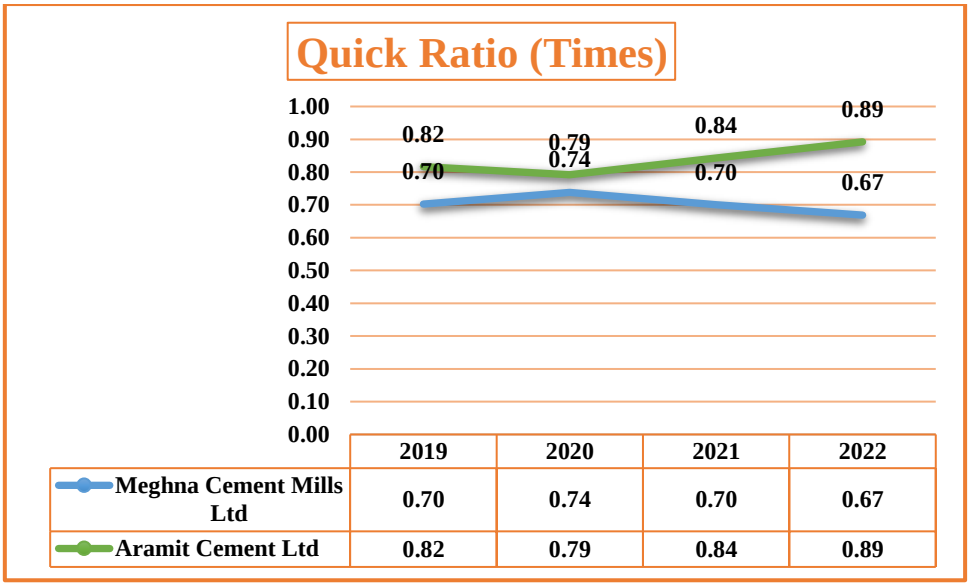
Interpretation: The current ratios for Meghna Cement Mills Ltd. and Aramit Cement Mills Ltd. in 2022 are 0.75 times and 0.92 times, respectively, indicating that they have 0.75 taka and 0.92 taka of current assets to cover 1 taka of current liabilities.

Time Series Analysis: Meghna Cement Mills Ltd.'s current ratio has declined from 0.80 in 2019 to 0.75 in 2022, indicating a decline in liquidity. On the other hand, Aramit Cement Ltd.'s current ratio has improved from 0.85 in 2019 to 0.92 in 2022, indicating better liquidity. Both companies have had fluctuating current ratios, but in general, Aramit Cement Ltd has had a better current ratio than Meghna Cement Mills Ltd. In 2022, Aramit Cement Ltd.'s current ratio has improved to 0.92, which is a good sign. Meghna Cement Mills Ltd.'s current ratio, on the other hand, has decreased to 0.75, which is a cause for concern.

Cross-Sectional Analysis: In 2019, both companies had a current ratio less than 1, which means they were unable to pay their short-term obligations using their current assets. However, in the subsequent years, Meghna Cement Mills Ltd. had a decreasing trend in its current ratio, indicating a decline in its ability to pay short-term obligations, whereas Aramit Cement Ltd. had an increasing trend, indicating an improvement in its ability to pay short-term obligations.

Quick Ratio

This ratio measures the company's ability to meet its immediate obligations using its most liquid assets, such as cash and accounts receivable.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	0.70	0.74	0.70	0.67
Aramit Cement Ltd	0.82	0.79	0.84	0.89

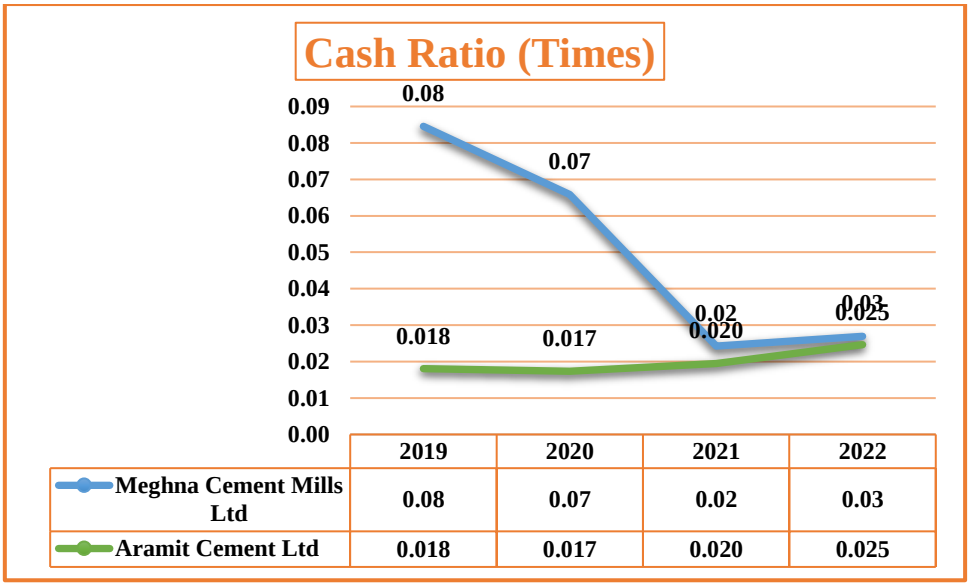
Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have quick ratios of 0.67 and 0.89, respectively, meaning that for every taka of current liability, they have 0.67 and 0.89 taka in current assets excluding inventory. (1 is anticipated)

Time trend analysis: The quick ratio is a more conservative measure of a company's liquidity as it only considers the most liquid assets, such as cash and accounts receivable, and excludes inventory. Meghna Cement Mills Ltd.'s quick ratio has declined from 0.70 in 2019 to 0.67 in 2022, indicating a decline in liquidity. Aramit Cement Ltd.'s quick ratio has improved from 0.82 in 2019 to 0.89 in 2022, indicating better liquidity. Both companies have had similar trends in quick ratios, with fluctuations but no clear trend. However, ACL has had a slightly better quick ratio than MCML in every year.

Cross-Sectional analysis: It is a more stringent measure of liquidity than the current ratio as it excludes inventories from current assets. In 2019, both companies had a quick ratio less than 1, which means they were unable to pay their short-term obligations using their most liquid assets. However, in the subsequent years, both companies had a slight improvement in their quick ratios. Meghna Cement Mills Ltd. had a decreasing trend, indicating a decline in its ability to pay short-term obligations from its most liquid assets, whereas Aramit Cement Ltd. had an increasing trend, indicating an improvement in its ability to pay short-term obligations from its most liquid assets.

Cash Ratio

This ratio measures the company's ability to pay its short-term obligations using only its cash and cash equivalents.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	0.08	0.07	0.02	0.03
Aramit Cement Ltd	0.018	0.017	0.020	0.025

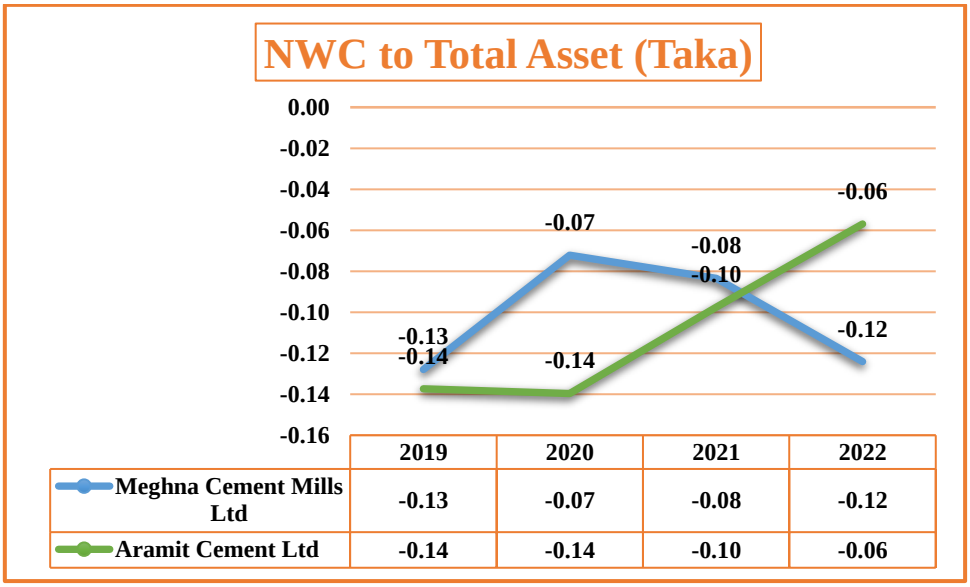
Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have cash ratios of 0.03 times and 0.025 times, respectively, indicating that they have 0.03 taka and 0.025 taka of cash, their most liquid asset, respectively, to cover each taka of current liabilities.

Time Series Analysis: Cash ratio measures a company's ability to pay off its current liabilities using only its cash and cash equivalents. Meghna Cement Mills Ltd.'s cash ratio has fluctuated over the years but has declined significantly from 0.08 in 2019 to 0.03 in 2022. Aramit Cement Ltd.'s cash ratio has improved from 0.018 in 2019 to 0.025 in 2022. Both companies have had very low cash ratios, which means they have very little cash on hand to cover their short-term obligations. However, MCML's cash ratio has improved slightly in 2021 and 2022.

Cross-Sectional Analysis: In 2019, both companies had a cash ratio less than 1, indicating that they were unable to pay their short-term obligations using only their cash and cash equivalents. In the subsequent years, Meghna Cement Mills Ltd. had a decreasing trend in its cash ratio, indicating a decline in its ability to pay short-term obligations from its cash and cash equivalents, whereas Aramit Cement Ltd. had an increasing trend, indicating an improvement in its ability to pay short-term obligations from its cash and cash equivalents.

NWC to Total Assets

This ratio measures the company's ability to use its net working capital to generate sales.



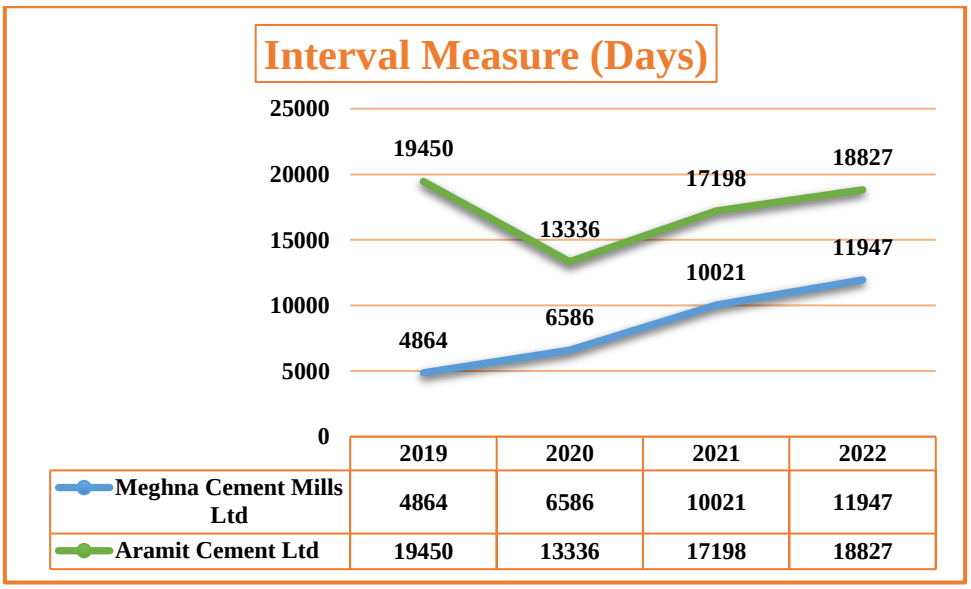
Interpretation: NWC to total asset ratios for Meghna Cement Mills Ltd. and Aramit Cement Ltd. in 2022 are -0.12 times and -0.06 times, respectively. This means that for every taka invested in total assets, they have disbursed 0.12 taka and 0.06 taka of net working capital.

Time Series Analysis: A negative ratio indicates that the company has more short-term liabilities than short-term assets. Meghna Cement Mills Ltd. and Aramit Cement Ltd. both have negative NWC to total asset ratios, indicating that they have more short-term liabilities than short-term assets. Both companies have had negative net working capital to total asset ratios every year, which is a cause for concern. However, Meghna Cement Mills Ltd.'s ratio has been slightly better than Aramit Cement Ltd.'s in the past two years.

Cross-Sectional Analysis: In 2019, both companies had negative NWC to total asset ratios, indicating that they had more short-term obligations than current assets. In the subsequent years, Meghna Cement Mills Ltd. had a decreasing trend in its NWC to total asset ratio, indicating a decline in its ability to cover its short-term obligations with current assets, whereas Aramit Cement Ltd. had an improving trend, indicating an improvement in its ability to cover its short-term obligations with current assets.

Interval Measure

The interval measure calculates the number of days a company can operate with its available cash and equivalents without relying on other sources of cash inflows. A higher interval measure indicates better liquidity.



Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have respective interval measures of 11947 days and 18827 days in 2022, meaning that they may carry on with their regular business operations for those lengths of time without increasing their present asset investments.

Time Series Analysis: Meghna Cement Mills Ltd.'s interval measure has increased significantly from 4864 in 2019 to 11947 in 2022, indicating deteriorating liquidity. Aramit Cement Ltd.'s interval measure has fluctuated over the years but has improved from 19450 in 2019 to 18827 in 2022. Both companies have had very high interval measures, which means they take a long time to convert their inventory and receivables into cash. ACL has had a higher interval measure than MCML in every year.

Cross-Sectional Analysis: In 2019, both companies had a high interval measure, indicating that they were taking a long time to pay their creditors. In the subsequent years, Meghna Cement Mills Ltd. had an increasing trend in its interval measure, indicating that it was taking longer to pay its creditors, whereas Aramit Cement Ltd. had a decreasing trend, indicating that it was paying its creditors faster.

Recommendation for improvement scopes (Liquidity Ratios):

Based on the liquidity ratios, both Meghna Cement Mills Ltd and Aramit Cement Ltd have some areas for improvement:

Meghna Cement Mills Ltd should focus on improving its current ratio, which has decreased to 0.75 in 2022. This can be done by increasing its current assets, such as by increasing its inventory turnover or reducing its accounts receivable turnover.

Both companies should aim to improve their quick ratios, which have been consistently low. This can be done by reducing their inventory levels and/or increasing their cash reserves.

Both companies should aim to improve their cash ratios, which have been consistently low. This can be done by reducing their short-term debt obligations or increasing their cash reserves.

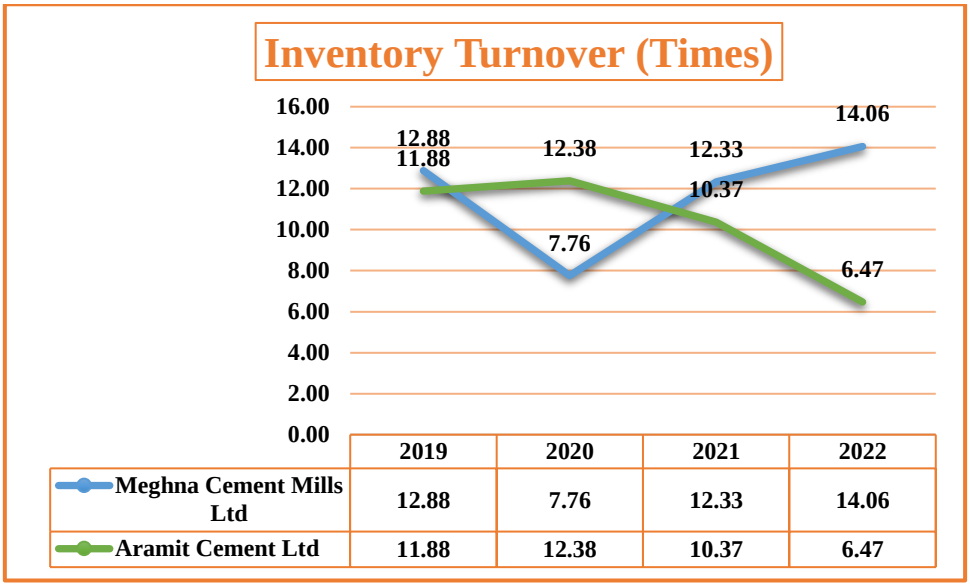
Both companies should aim to improve their net working capital to total asset ratios, which have been consistently negative. This can be done by improving their inventory turnover, reducing their accounts receivable turnover, or reducing their short-term debt obligations.

Both companies should aim to reduce their interval measures, which are very high. This can be done by improving their inventory turnover or reducing their accounts receivable turnover.

Activity Ratios

Inventory Turnover Ratio

Inventory turnover ratio is a measure of how efficiently a company manages its inventory.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	12.88	7.76	12.33	14.06
Aramit Cement Ltd	11.88	12.38	10.37	6.47

Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have respective inventory turnovers of 14.06 times and 6.47 times in 2022, indicating that they have, on average, sold and refilled their inventories 14.06 times and 6.47 times.

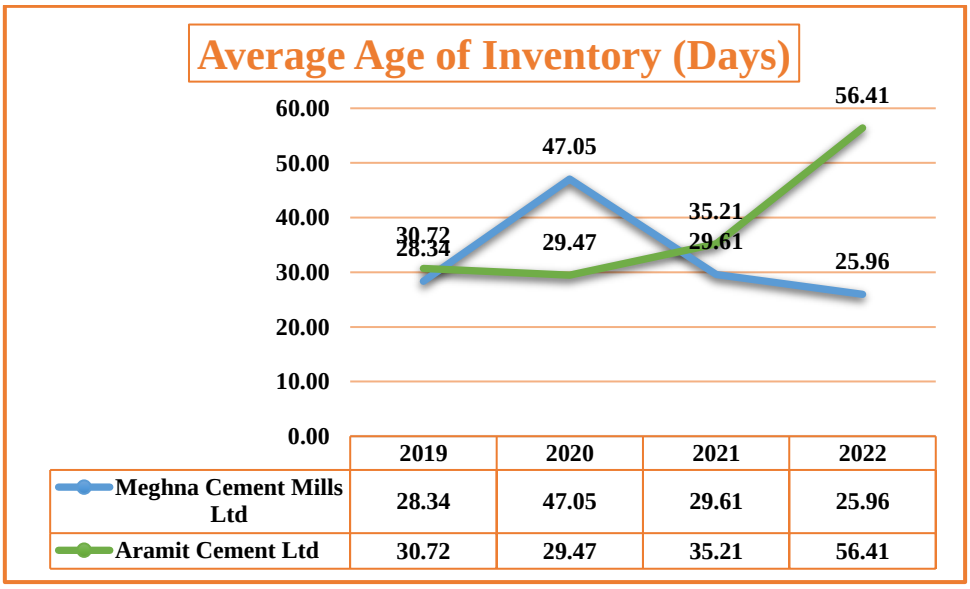
Time Series Analysis: Meghna Cement Mills Ltd's inventory turnover ratio has fluctuated over the years, starting at 12.88 times in 2019 and dropping to 7.76 times in 2020. However, the ratio has increased significantly in 2021 and 2022, reaching 12.33 times and 14.06 times, respectively. This suggests that the company has been able to manage its inventory more efficiently in the past two years. For Aramit Cement Ltd, their inventory turnover ratio has been decreasing over the past four years, from 11.88 times in 2019 to 6.47 times in 2022. This suggests that the company is not efficiently managing its inventory. Additionally, their average age of inventory has been increasing over the past two years, from 29.47 days in 2020 to 56.41 days in 2022. This suggests that the company is taking longer to sell its inventory.

For Meghna Cement Mills Ltd, their inventory turnover ratio has shown an overall upward trend over the past four years, while their average age of inventory has shown a downward trend. This suggests that the company has been able to improve its operational efficiency over time. For Aramit Cement Ltd, their inventory turnover ratio has been decreasing consistently over the past four years, while the average age of inventory has been increasing over the past two years. This suggests that the company is facing challenges in managing its inventory efficiently. It is important for the company to identify the root causes of these issues and take corrective actions to improve its operational efficiency.

Cross-Sectional Analysis: Meghna Cement Mills Ltd's inventory turnover ratio has fluctuated over the four years, with a significant decrease in 2020 followed by a substantial increase in 2021 and 2022. Aramit Cement Ltd's inventory turnover ratio has been relatively stable over the years, with a slight increase in 2020 followed by a decrease in 2021 and a significant drop in 2022. However, there was a dip in both ratios in 2020, which could be due to the impact of the COVID-19 pandemic on the company's operations.

Average Age of Inventory

Average age of inventory is the number of days it takes for a company to sell its inventory.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	28.34	47.05	29.61	25.96
Aramit Cement Ltd	30.72	29.47	35.21	56.41

Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have an average age of inventory of 25.96 days and 56.41 days, respectively, in 2022. This suggests that on average, it takes them 25.96 days and 56.41 days to sell their goods.

Time Series Analysis: Meghna Cement Mills Ltd's average age of inventory has also fluctuated over the years, starting at 28.34 days in 2019, increasing to 47.05 days in 2020, and then decreasing to 29.61 days in 2021 and 25.96 days in 2022. This suggests that the company has been able to sell its inventory more quickly in the past two years, indicating that the company is holding inventory for a shorter duration before it is sold. This is a positive sign as it reduces the risk of inventory obsolescence or spoilage.

For Aramit Cement Ltd, the average age of inventory increased from 30.72 days in 2019 to 56.41 days in 2022, indicating that the company is holding inventory for a longer duration before it is sold. This could lead to inventory obsolescence or spoilage, which could negatively impact the company's financial performance.

Cross-sectional analysis: Meghna Cement Mills Ltd.'s average age of inventory has been relatively stable over the years, with a significant increase in 2020 followed by a decrease in 2021 and 2022. Aramit Cement Ltd.'s average age of inventory has fluctuated over the years, with a significant increase in 2021 and a sharp increase in 2022. In conclusion, Meghna Cement Mills Ltd has performed better than Aramit Cement Ltd in terms of inventory turnover and the average age of inventory for the years 2019 to 2022.

Recommendations for improvement scope (activity ratios):

Meghna Cement Mills Ltd can work on reducing the average age of its inventory, which has been increasing since 2019. This can be achieved by implementing better inventory management practices, such as optimizing order quantities, improving forecasting accuracy, and identifying slow-moving or obsolete items.

Aramit Cement Ltd can focus on improving its inventory turnover ratio, which has been decreasing steadily since 2020. This can be achieved by increasing sales volume, reducing lead times, and implementing effective marketing and sales strategies to attract more customers.

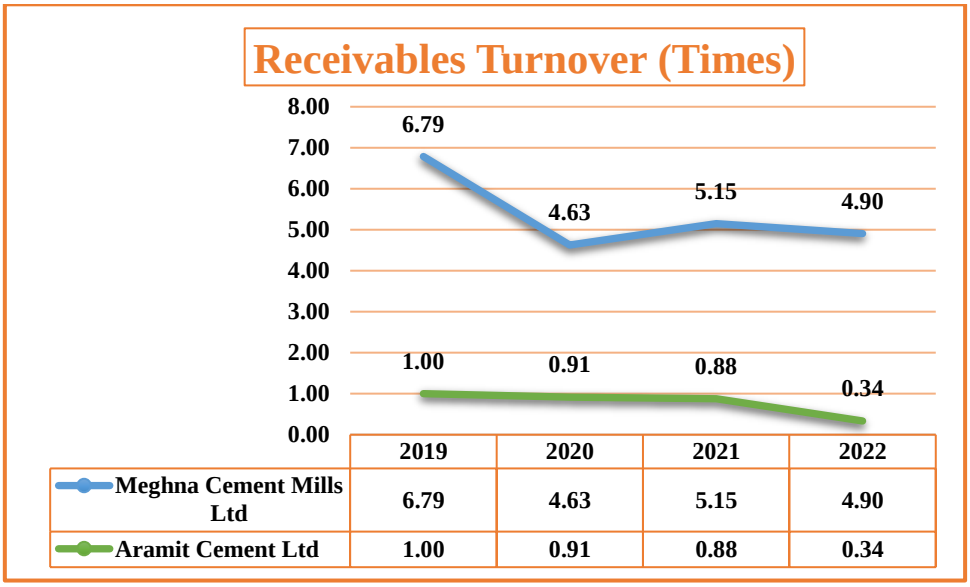
Aramit Cement Ltd should also work on reducing the average age of its inventory, which has been increasing since 2021. This can be achieved by implementing the same inventory management practices as mentioned for Meghna Cement Mills Ltd.

Overall, improving inventory management practices can help both companies reduce costs, improve cash flow, and increase profitability.

Receivable Ratios

Receivables Turnover

Receivable turnover ratio measures the efficiency of using the company's assets. A higher ratio indicates higher efficiency, as the company collects payments from customers more frequently.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	6.79	4.63	5.15	4.90
Aramit Cement Ltd	1.00	0.91	0.88	0.34

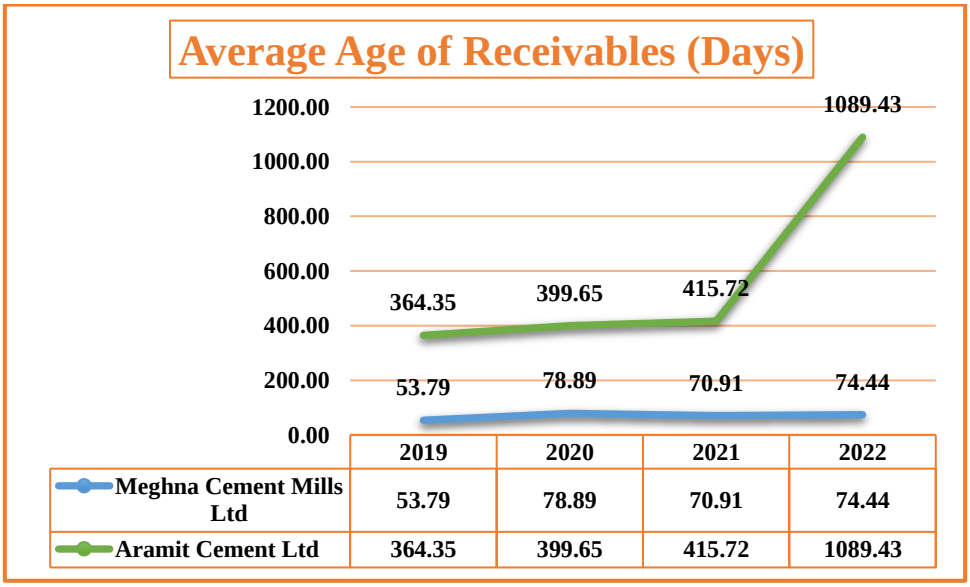
Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. had respective receivables turnover rates of 4.90 times and 0.34 times in 2022, indicating that on average they have converted receivables into sales at a rate of 4.90 times and 0.34 times.

Time Series Analysis: The receivables turnover ratio of Meghna Cement Mills Ltd was 6.79 times in 2019, 4.63 times in 2020, 5.15 times in 2021 and 4.90 times in 2022. The receivables turnover ratio of Aramit Cement Ltd was 1.00 times in 2019, 0.91 times in 2020, 0.88 times in 2021 and 0.34 times in 2022. Meghna Cement Ltd had a receivables turnover ratio of 6.79 in 2019, indicating that it collected payments from its customers approximately 6.78 times during that year. The ratio declined to 4.63 in 2020, but increased to 5.15 in 2021 before decreasing slightly to 4.90 in 2022. Overall, Meghna Cement Ltd has a relatively high receivables turnover ratio, indicating that it is efficiently managing its accounts receivable.

Cross-Sectional Analysis: Aramit Cement Ltd had a receivables turnover ratio of only 1.00 in 2019, which means it collected payments from its customers only once during that year. The ratio decreased further to 0.91 in 2020, and then to 0.88 in 2021, indicating that the company is experiencing difficulty in collecting payments from its customers. In 2022, the ratio dropped sharply to 0.34 suggesting that Aramit Cement Ltd is facing significant challenges in managing its accounts receivable.

Average age of Receivables

The average age of receivables is the estimated duration a business takes to collect payments for accounts receivable the lower ratio, is better for the company's finances. But the higher the ratio, is better for the relationship between the company and its debtors.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	53.79	78.89	70.91	74.44
Aramit Cement Ltd	364.35	399.65	415.72	1089.43

Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd.'s average age of receivables in 2022 is 74.44 days and 1089.43 days, respectively, suggesting that it takes them 74.44 days and 1089.43 days to recover money from their credit customers.

Time Series Analysis: Meghna Cement Ltd.'s average age of accounts receivable was 53.80 days in 2019, which increased to 79.49 days in 2020 and further increased to 71.36 days in 2021 and again slightly increased to 74.85 in 2022 for days. Aramit Cement Ltd's average age of accounts receivable was significantly higher at 364.35 days in 2019, increased to 399.65 days in 2020 and further increased to 415.72 days in 2021 before increasing to 1089.43 days in 2022.

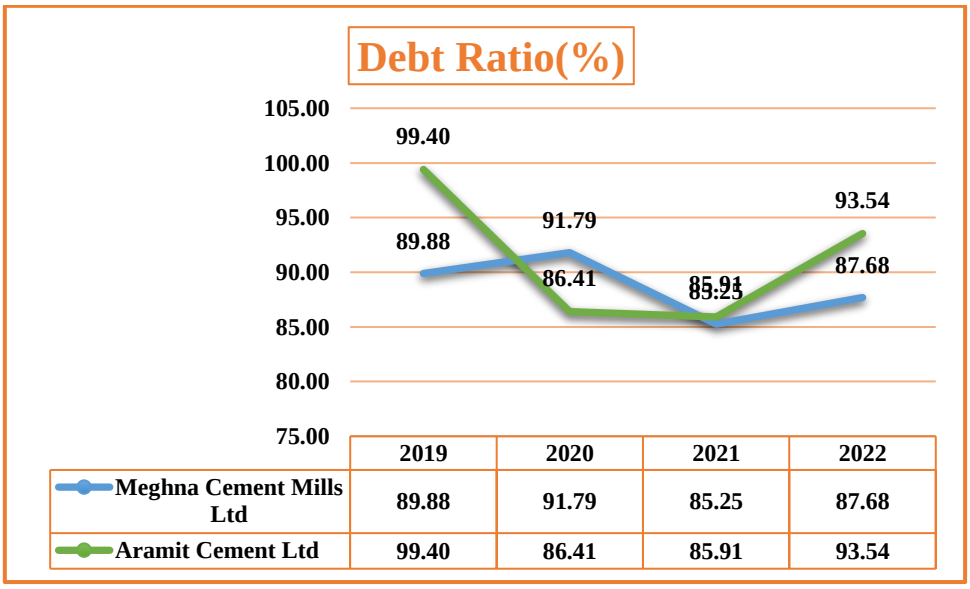
For Meghna Cement Ltd, the four-year trend for the average age of receivables shows some variability. The average aging of accounts receivable increased from 2019 to 2020, then decreased in 2021 and then increased slightly in 2022. Aramit Cement Ltd's average aging of receivables was very high in 2019 and 2020, continued to rise in 2021 and increased significantly in 2022

Cross-Sectional Analysis: Aramit Cement Ltd takes much longer to collect payments than Meghna Cement Ltd. This indicated that Aramit Cement Ltd was slower to collect payments from customers than Meghna Cement Ltd, indicating a less effective credit and collection policy.

Long Term Solvency Ratios

Debt Ratio

The debt ratio measures the proportion of a company's total assets that is financed by its creditors. The debt ratio gives an idea of how a company finances its assets and the company's ability to pay long-term debts. A lower debt ratio is better for the company.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	89.88	91.79	85.25	87.68
Aramit Cement Ltd	99.40	86.41	85.91	93.54

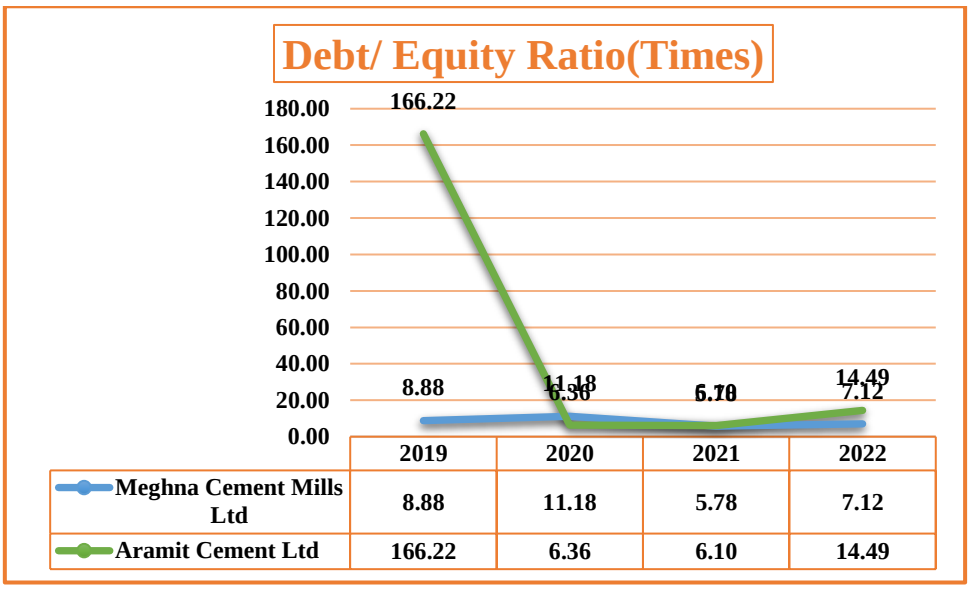
Interpretation: For each 100 taka of investment, Meghna Cement Mills Ltd. and Aramit Cement Ltd. raised 87.68 taka and 93.54 taka through debt, respectively, according to their respective debt ratios of 87.68% and 93.54% in 2022.

Time Series Analysis: Meghna Cement Ltd's debt ratio was 89.88% in 2019, increased to 91.79% in 2020, then decreased to 85.25% in 2021 and slightly increased again to 87.68% in 2022. Aramit Cement Ltd's debt ratio increased significantly to 99.40% in 2019, decreased to 86.41% in 2020, further decreased to 85.91% in 2021, and then increased to 93.54% in 2022. year. The debt ratio of Meghna Cement Ltd shows some fluctuation. The percentage increased from 2019 to 2020, then decreased in 2021 and slightly increased in 2022. And Aramit Cement Ltd, the debt ratio is more stable with a significant decrease in 2020, a slight decrease in 2021 and an increase in 2022.

Cross-Sectional Analysis: Compared to Meghna Cement Ltd, Aramit Cement Ltd's debt ratio was much higher in 2019, which indicates that it is more leveraged than Meghna Cement Ltd. But over time, Aramit Cement Ltd was able to significantly reduce its debt ratio to Cement Ltd than Meghna Cement Ltd.

Debt/Equity Ratio

The debt-to-equity ratio calculates how much of the firm's total assets were financed by its total liabilities and common stock equity. It is better for the company to have a lower debt-to-equity ratio.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	8.88	11.18	5.78	7.12
Aramit Cement Ltd	166.22	6.36	6.10	14.49

Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have debt-to-equity ratios of 7.12 and 14.49 in 2022, respectively, meaning that for every 1 taka of equity, they have debt totaling 7.12 and 14.49 taka, respectively.

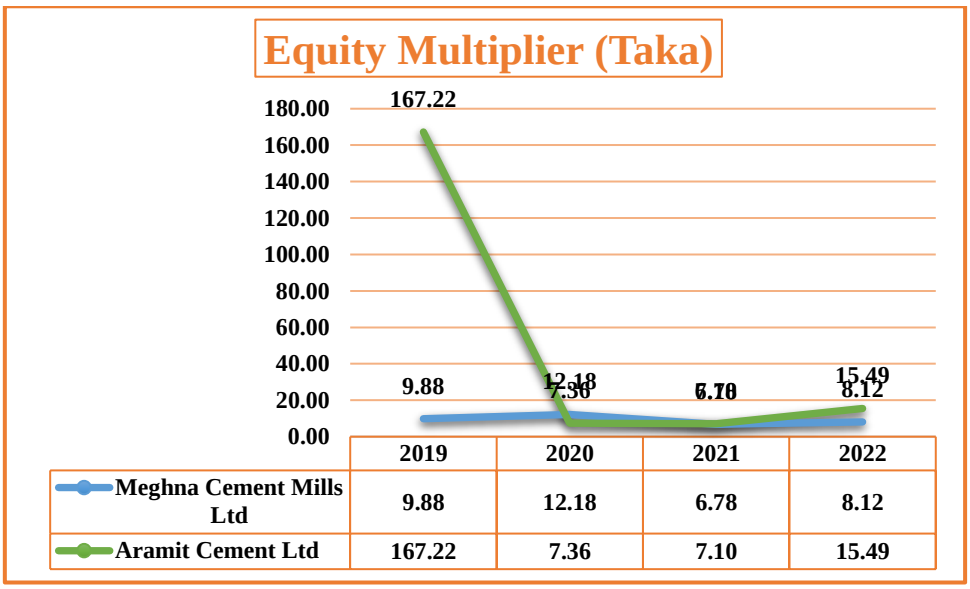
Time Series Analysis: Meghna Cement Ltd. had a relatively low Debt/Equity Ratio of 8.88 in 2019, which increases to 11.18 in 2020, fell to 5.78 in 2021, and then again increased once more to 7.12 in 2022. It is a positive development because the company was able to decrease its debt levels and increase equity financing, as indicated by the ratio's decline in 2021.

Aramit Cement Ltd had a much higher Debt/Equity Ratio (times) of 166.22 in 2019, which fell to 6.36 in 2020 and then to 6.10 in 2021, but then increases to 14.49 in 2022. While the company was able to significantly lower its debt levels in 2020 and 2021, the rise in 2022 increases the possibility that it may have taken on more debt to finance its operations which can be cause for concern.

Cross-Sectional Analysis: Aramit Cement Ltd had a significantly higher Debt/Equity Ratio (times) in 2019 than Meghna Cement Ltd, indicating that it was more heavily indebted than Meghna Cement Ltd. Aramit Cement Ltd, however, was able to more significantly lower its Debt/Equity Ratio (times) over time than Meghna Cement Ltd.

Equity Multiplier

Equity Multiplier is a financial leverage ratio which calculates the percentage of a company's assets that are financed by its shareholders. Higher equity multiplier indicates that the company is using more debt to finance its assets.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	9.88	12.18	6.78	8.12
Aramit Cement Ltd	167.22	7.36	7.10	15.49

Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have equity multipliers of 8.12 and 15.49 in 2022, respectively, meaning that they have invested 8.12 and 15.49 taka of assets for every taka of equity, respectively.

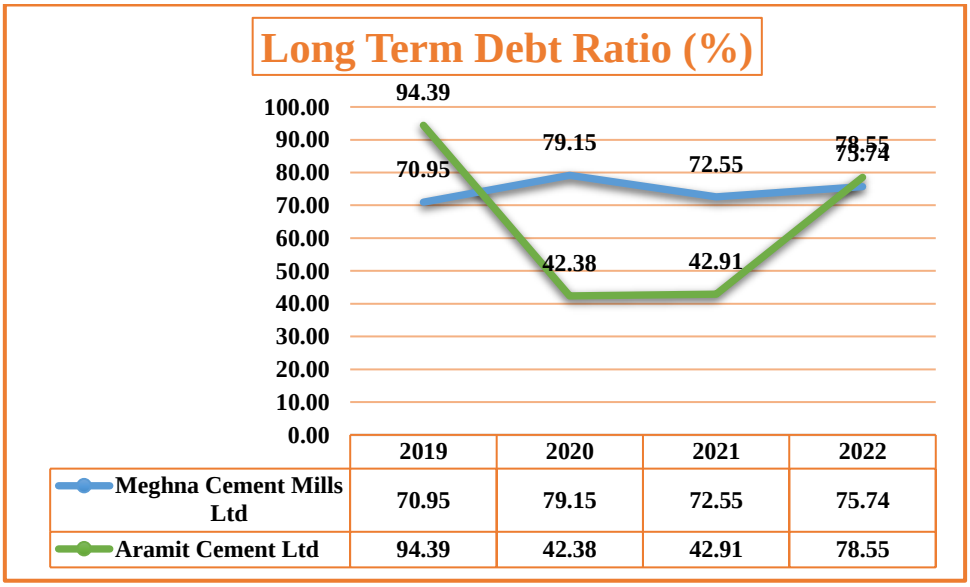
Time Series Analysis: For Meghna Cement Ltd., the Equity Multiplier has increased from 9.88 in 2019 to 12.18 in 2020, indicating that the company has been using more debt financing to fund its assets. It fell to 6.78 in 2021 before rising to 8.12 in 2022. This suggests that the company cut back on its use of debt financing in 2021 before increasing in 2022.

For Aramit Cement Ltd, the Equity Multiplier was quite high at 167.22 in 2019 but then decreased significantly to 7.36 in 2020 before decreasing further to 7.10 in 2021 and then increasing to 15.49 in 2022. This suggests that the company has been reducing its reliance on debt financing in recent years, but then increased it again in 2022.

Cross-Sectional Analysis: Meghna Cement Ltd has a lower equity multiplier than Aramit Cement Ltd. This suggests that Meghna Cement Ltd uses less debt to finance its assets than Aramit Cement Ltd. Meghna Cement Ltd is less risky. But Aramit Cement Ltd. has a higher equity multiplier, which indicates higher level of leverage and possibly higher risk.

Long Term Debt Ratio

The Long-Term Debt Ratio measures the percentage of a company's total assets that are financed by long-term debt. Higher long-term debt ratio can indicate higher financial risk for the company, as it is more reliant on debt financing, while a lower long-term debt ratio can indicate a more stable financial position with less risk.



Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have long-term debt ratios of 75.74% and 78.55%, respectively, in 2022. This means that, for every 100 taka of long-term capital, debt accounted for 75.74 and 78.55 taka, respectively.

Time Series Analysis: Meghna Cement Ltd.'s long-term debt ratio has fluctuated over the last four years. The ratio jumped from 70.95% in 2019 to 79.15% in 2020, indicating that the company took on more long-term debt during this time. However, the ratio fell to 72.55% in 2021, indicating that the company either reduced its long-term debt or increased its equity. The ratio then increased to 75.74% in 2022, indicating that the company took on more long-term debt.

The long-term debt ratio of Aramit Cement Ltd. has also fluctuated over the last four years. The ratio fell significantly from 94.39% in 2019 to 42.38% in 2020, indicating that the company either reduced or increased its long-term debt. The ratio then rose slightly to 42.91% in 2021, indicating that the company's long-term debt remained stable during this time. However, the ratio increased dramatically in 2022 to 78.55%, indicating that the company took on more long-term debt.

Cross-Sectional Analysis: In each of the four years, Meghna Cement Ltd. has a lower long-term debt ratio than Aramit Cement Ltd. However, both companies' long-term debt ratios have fluctuated over time, indicating changes in their capital structure and financial risk profiles. which indicates that Meghna Cement Ltd has a lower degree of financial risk and is in a relatively better financial position in terms of its long-term debt.

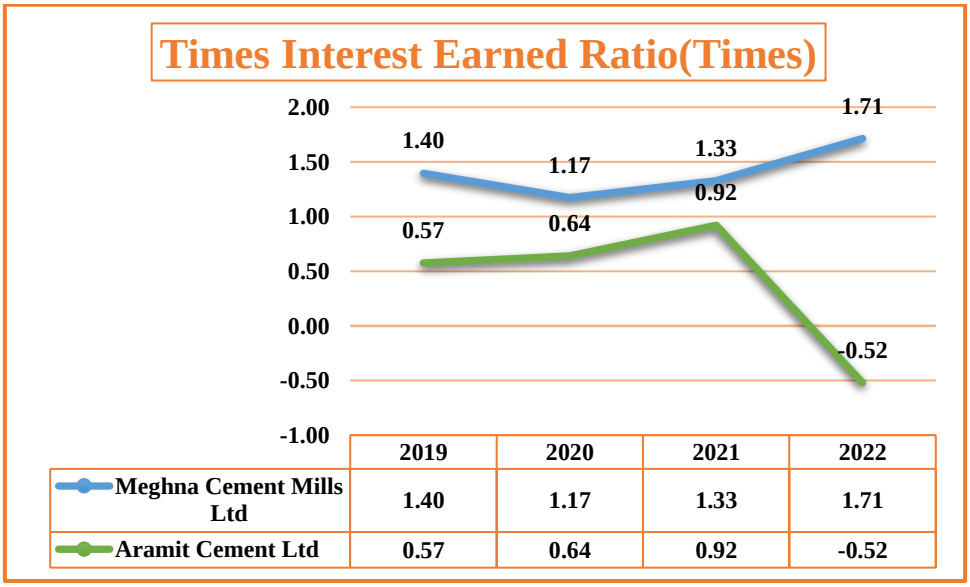
Recommendation for improvement scopes (Long term solvency ratios):

Most of the long-term solvency ratios of Meghna Cement Ltd is fluctuating over the last few years. In some years it is below than Aramit Cement Ltd ratio and in some years, it is higher which indicates higher chances of bankruptcy. To improve those ratios Meghna Cement Mills Ltd may issue additional equity shares in order to boost the company's equity base. The debt-to-equity ratio, a crucial indicator of long-term solvency, will be improved as a result. Meghna Cement Mills Ltd. may look into refinancing its current debt. Then they will be able to pay down its long-term debts. Meghna Cement Mills Ltd might strengthen its liquidity situation by increasing its cash reserves. This will increase the company's long-term solvency and enable it pay its long-term debts as they become due.

Coverage Ratios

Times Interest Earned Ratio

Times interest earned ratio is used to assess how easily a business can pay the interest on its existing debt. The interest coverage ratio is generally calculated by dividing a company's earnings before interest and taxes (EBIT) by its interest expense during a given period.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	1.40	1.17	1.33	1.71
Aramit Cement Ltd	0.57	0.64	0.92	-0.52

Interpretation: The 2022 times interest earned ratio for Meghna Cement Mills Ltd. and Aramit Cement Ltd. is 1.71 times and 0.52 times, respectively. This indicates that Meghna Cement Mills Ltd. will be able to pay its interest expense 1.71 times more but Aramit Cement Ltd. will not be able to pay its interest expense in 2022.

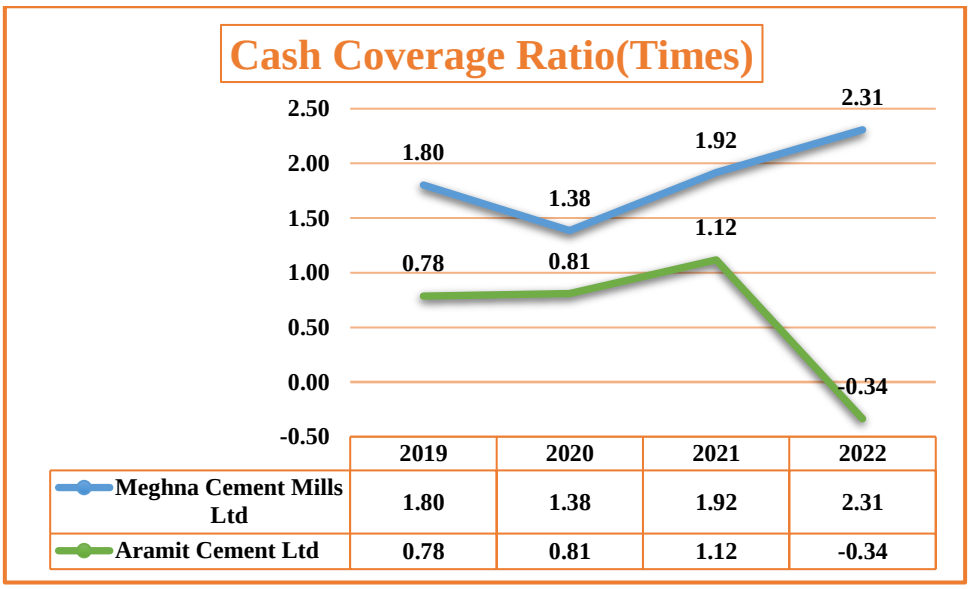
Time Series Analysis: As we can see from above two figures Meghna Cement Mills Ltd has maintained a balanced times interest earned ratio over last 4 years. It was 1.40 times in 2019, then slightly decreased by 16%, which was 1.17 times in 2020. Then again it goes up by 14% than 2020, which is 1.33 times in 2021. In 2022 they performed well again, and the ratio goes up by 29% than 2021, which was 1.71 times in 2022.

Aramit Cement Ltd has done a poor job in maintaining times interest earned ratio over last 4 years. It was 0.57 times in 2019, then slightly increased by 12%, which was 0.64 times in 2020. Then again it goes up by 44% than 2020, which is 0.92 times in 2021. In 2022 they performed really bad again, and the ratio goes down by 157% than 2021, which was -0.52 times in 2022.

Cross-Sectional Analysis: Compared to Aramit Cement Ltd, Meghna Cement Mills Ltd really done a fantastic job in maintaining a balance and good times interest earned ratio over last 4 years. There was a gap of 0.83 times in 2019, the gap reduced in next two years, but in 2022 the gap was 2.23 times. Aramit was far behind to maintain a standard times interest earned ratio of 1.5 times. On the other hand, Meghna always ensures a healthy times interest earned ratio in each year. Which can ensure that Meghna is far more solvent firm than Aramit, they have enough fund to give return to its shareholders after paying the debt obligations. And Aramit is most likely struggling with the burden expenses of debt.

Cash Coverage Ratio

The cash coverage ratio, which is expressed as a ratio of the cash available to the amount of interest to be paid, is helpful for figuring out how much cash is available to pay for a borrower's interest expense.



Interpretation: The cash coverage ratios for Meghna Cement Mills Ltd. and Aramit Cement Ltd. in 2022 are 2.31 times and -0.34 times, respectively. This means that Meghna Cement Mills Ltd. will be able to pay its interest expense 2.31 times more in 2022, including depreciation, but Aramit Cement Ltd. will not be able to do so even after considering in their depreciation expense.

Time Series Analysis: Meghna Cement Mills Ltd has maintained a balanced cash coverage ratio over last 4 years. It was 1.80 times in 2019, then slightly decreased by 23%, which was 1.38 times in 2020. Then again it goes up by 39% than 2020, which is 1.92 times in 2021. In 2022 they performed well again, and the ratio goes up by 20% than 2021, which was 2.31 times in 2022.

Aramit Cement Ltd has done a poor job in maintaining cash coverage ratio over last 4 years. It was 0.78 times in 2019, then slightly increased by 4%, which was 0.81 times in 2020. Then again it goes up by 38% than 2020, which is 1.12 times in 2021. In 2022 they performed really bad again, and the ratio goes down by 130% than 2021, which was -0.34 times in 2022.

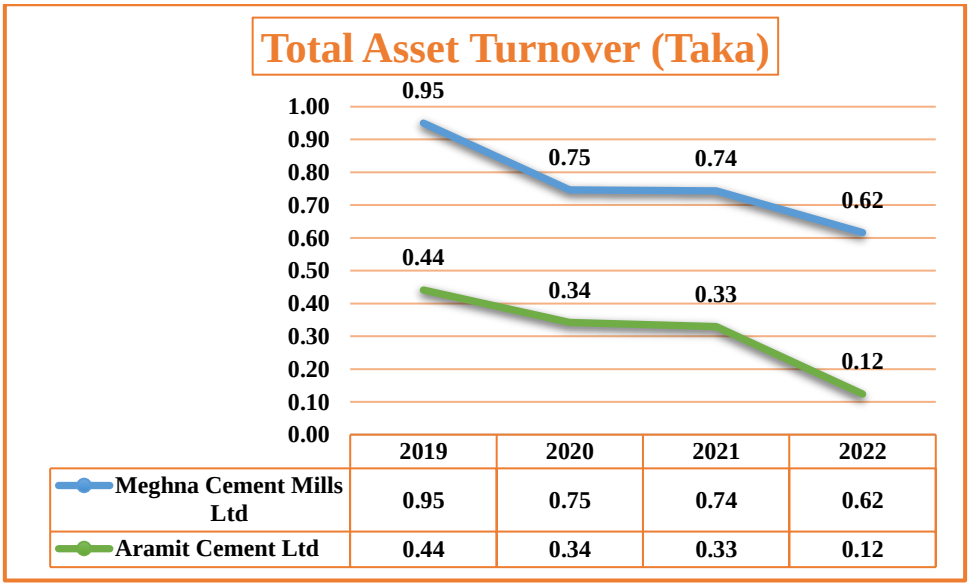
Cross-Sectional Analysis: Compared to Aramit Cement Ltd, Meghna Cement Mills Ltd really done a fantastic job in maintaining a balance and good cash coverage ratio over last 4 years. There was a gap of 1.02 times in 2019, the gap reduced in next two years, but in 2022 the gap

was 2.65 times. Aramit was far behind to maintain a standard cash coverage ratio of 1 time. On the other hand, Meghna always ensures a healthy cash coverage ratio in each year. Which can ensure that Meghna is far more solvent firm than Aramit, they have enough fund to pay the lenders and have the exposure to get more funds from lenders. And Aramit is most likely struggling with the burden expenses of debt, as a result they were lacking cash. Thus, lenders can reconsider about the debt facilities they facilitated to Aramit and in future they might face shortage of available debt from lenders.

Asset Efficiency Ratios

Total Asset Turnover

Total Asset Turnover (TAT) is a financial metric that assesses how effectively a business uses its assets to produce revenue. The total assets to revenue (TAT) ratio is calculated by dividing the total revenue by the average total assets over a given time period.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	0.95	0.75	0.74	0.62
Aramit Cement Ltd	0.44	0.34	0.33	0.12

Interpretation: The total asset turnover for Meghna Cement Mills Ltd. and Aramit Cement Ltd. in 2022 is 0.62 taka and 0.12 taka, respectively, meaning that for every 1 taka invested in an asset, they have produced 0.62 taka and 0.12 taka of sales.

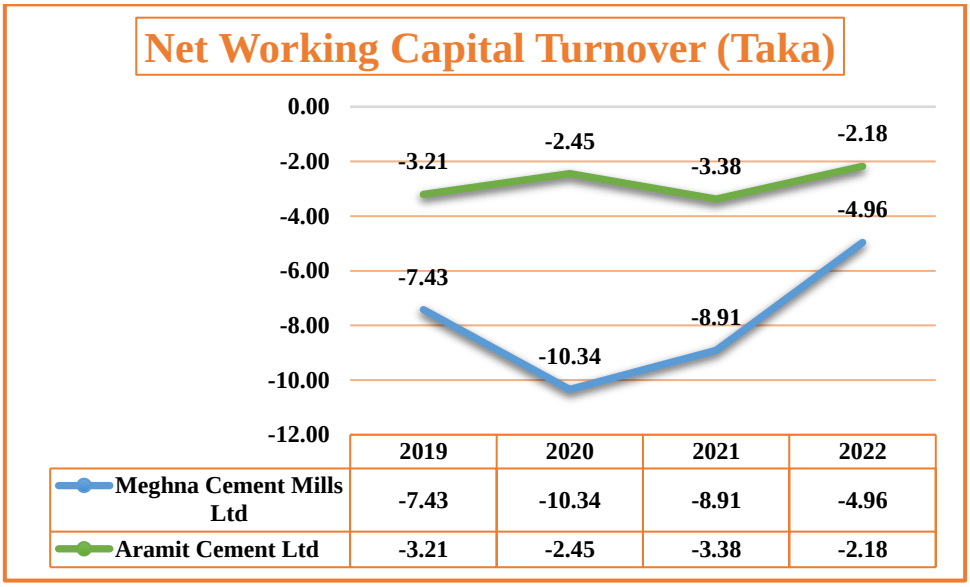
Time Series Analysis: Meghna's TAT ratio decreased from 0.95 in 2019 to 0.62 in 2022, showing that the business is producing less revenue per dollar of assets. Investors might be concerned about this since it suggests that the company might be having trouble maximizing the use of its assets.

Similar to this, Aramit's TAT ratio decreased from 0.44 in 2019 to 0.12 in 2022, showing that the company is also becoming less efficient in using its assets to generate revenue. Investors might be concerned given this trend because it could indicate that the company's performance is deteriorating.

Cross-Sectional Analysis: Based on the provided data, we can see that Meghna had a higher TAT ratio than Aramit in each of the years from 2019 to 2022. In 2019, Meghna's TAT ratio was 0.95 compared to Aramit's TAT ratio of 0.44. Similarly, in 2022, Meghna's TAT ratio was 0.62 compared to Aramit's TAT ratio of 0.12. This suggests that Meghna is relatively more efficient in utilizing its assets to generate revenue than Armit. However, it's important to note that there may be other factors that could affect this comparison, such as differences in industry dynamics, company size, or management strategies.

Net Working Capital Turnover

An organization's liquidity and capacity to fulfill short-term obligations are gauged by Net Working Capital (NWC), a financial metric. It is determined by deducting a company's current assets from its current liabilities.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	-7.43	-10.34	-8.91	-4.96
Aramit Cement Ltd	-3.21	-2.45	-3.38	-2.18

Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd.'s net working capital turnover in 2022 is -4.96 taka and -2.18 taka, respectively, meaning that for every 1 taka of invested NWC, they lost 4.96 taka and 2.18 taka.

Time Series Analysis: Meghna's NWC went from -7.42 in 2019 to -4.94 in 2022, an improvement. It was, however, negative the entire time, suggesting that the business might be having trouble controlling its current assets and liabilities. Investors may be concerned about

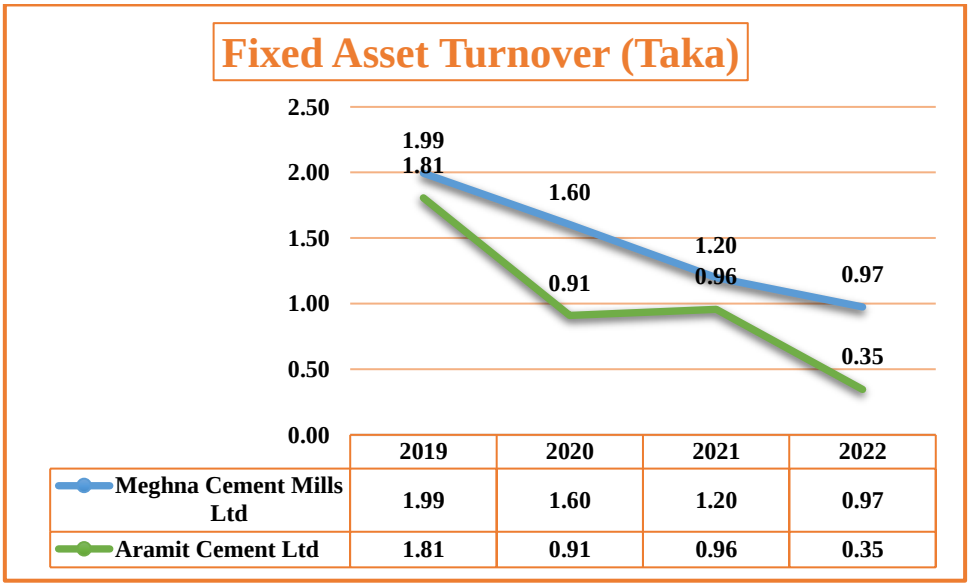
this pattern because negative NWC may portend short-term financial difficulties for the company in terms of paying its debts and funding its operations.

A similar decline was seen in Armit's NWC, which dropped from -3.21 in 2019 to -2.18 in 2022. This suggests that the company might also be having trouble keeping track of its current liabilities and assets. Nevertheless, the fact that Armit's NWC increased in 2022 is encouraging and might mean that the business is making efforts to address its liquidity issues.

Cross-Sectional Analysis: Meghna had a NWC of -4.94 in 2022, indicating that the company may face difficulties in meeting its short-term obligations. On the other hand, Aramit's NWC improved to -2.18 in 2022 from -3.38 in 2021, suggesting that the company may be taking steps to address its liquidity challenges. However, it is important to note that Aramit's NWC was consistently negative in the previous years, indicating ongoing challenges in managing its current assets and liabilities. Meghna's NWC also remained negative in all the years, except for 2022 where it improved slightly.

Fixed Asset Turnover

Fixed Asset Turnover (FAT) is a financial metric that assesses how well a business utilizes its fixed assets to produce revenue. A higher FAT ratio shows that a business is making more money per dollar invested in fixed assets.



Interpretation: For Meghna Cement Mills Ltd. and Aramit Cement Ltd., the fixed asset turnover in 2022 is 0.97 taka and 0.35 taka, respectively. This means that for every 1 taka invested in a fixed asset, they have generated 0.97 taka and 0.35 taka of revenue.

Time Series Analysis: Meghna's FAT ratio has been steadily decreasing from 1.99 in 2019 to 0. 97 in 2022, according to the data provided. The company may be using its fixed assets less effectively to generate revenue, according to this indication. This pattern might be a sign that the business needs to increase its fixed asset investments or increase the efficiency with which it uses its current assets.

Similar to this, Aramit's FAT ratio decreased from 1.81 in 2019 to 0. 35 in 2022. This suggests that the company's use of its fixed assets to generate revenue is also becoming less effective. This pattern might indicate that the business is experiencing declining performance, which could be a concern for investors. In terms of comparison, Meghna had a higher FAT ratio than Aramit in all the years, except for 2022, where both companies' ratios declined significantly. This suggests that both companies are facing challenges in utilizing their fixed assets effectively to generate revenue.

Cross-Sectional Analysis: Overall, the cross-sectional analysis indicates that Meghna was more efficient in utilizing its fixed assets to generate revenue than Aramit in the past. However, both companies have experienced declines in their FAT ratios, which could indicate challenges in optimizing the utilization of their fixed assets. Investors should analyse the reasons behind these trends and evaluate the companies' investment strategies and utilization of existing assets before making investment decisions.

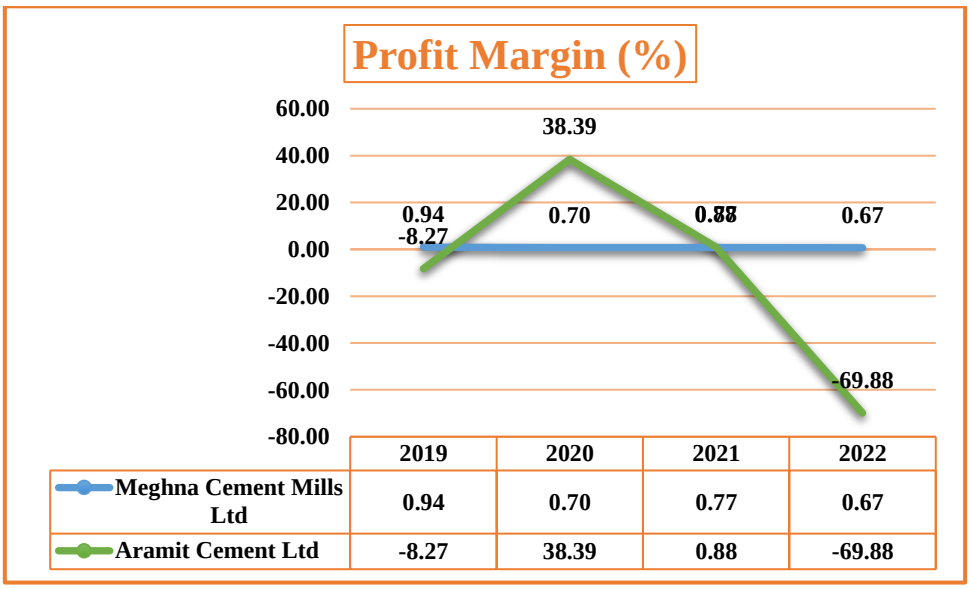
Recommendation for improvement scopes (Asset efficiency Ratios):

Among the following asset efficiency ratios, Meghna Cement Mills Ltd is performing well compared to Aramit Cement Ltd but over the time those ratios are decreasing. To improve this asset efficiency ratios Meghna Cement Mills Ltd can boost their sales and spend money on marketing and sales tactics to find new clients and grow their market share. They can also implement a just-in-time inventory management system to lower inventory levels and improve their supply chain by only placing orders for inventory when it is actually needed, this technique lowers the amount of cash held in inventory. They should determine which fixed assets are not producing enough revenue and either get rid of them or find ways to make them more productive. To reduce downtime, they may entail making investments in new technology, updating current equipment, or optimizing maintenance procedures.

Profitability Ratios

Profit Margin

Profitability ratio calculates a company's profitability by expressing net income as a proportion of total revenue. A higher profit margin means that a business is making more money for every dollar of sales.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	0.94	0.70	0.77	0.67
Aramit Cement Ltd	-8.27	38.39	0.88	-69.88

Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have respective profit margins of 0.67% and -69.88% in 2022, meaning that for every 100 takas of revenue, they made 0.67 taka in profit and 69.88 taka in loss for common stockholders.

Time Series Analysis: With a high of 0.94 in 2019 and a low of 0.67 in 2022, Meghna's profit margin has been fairly consistent over the years, according to the data provided. This implies that despite some variations in revenue, the business has been able to maintain its profitability.

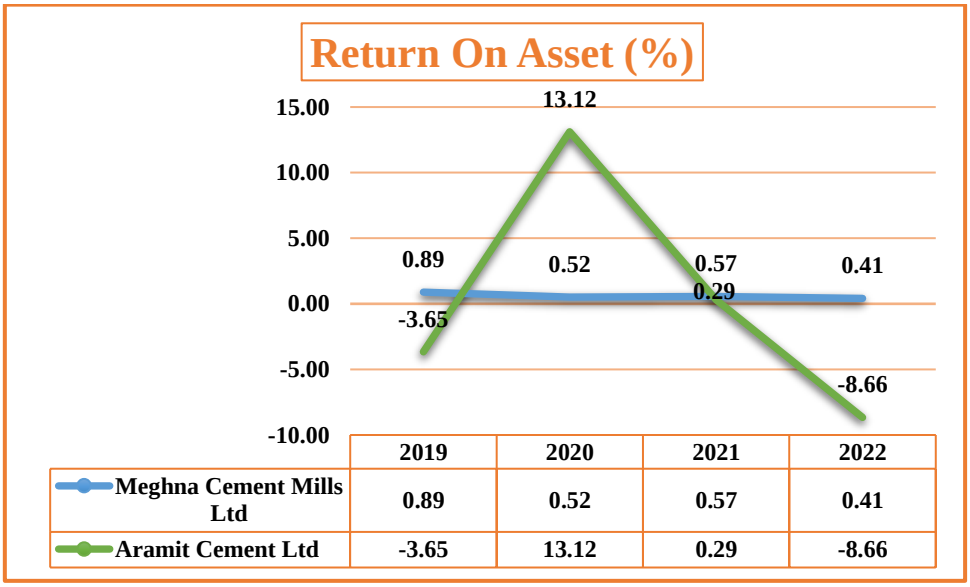
The profit margin for Armit, on the other hand, has fluctuated a lot over time. The company's negative profit margin was -8.27 in 2019, then shot up to 38.39 in 2020, dropped to 0.88 in 2021, and then significantly increased to -69.88 in 2022. This pattern suggests that the business has had a difficult time sustaining its profitability, possibly as a result of factors like shifting market conditions, problems with cost control, or other internal or external factors.

Cross-Sectional Analysis: In a cross-sectional analysis, we can compare the profit margin of Meghna and Aramit. Meghna has consistently had a higher profit margin than Aramit over the years, indicating that Meghna has been more successful in generating profits from its

operations. Aramit's highly volatile profit margin could be a concern for investors as it suggests that the company is facing significant challenges in maintaining its profitability.

Return on Assets

Return on assets (ROA) assesses a company's profitability in relation to its total assets. Divide the company's net income by its average total assets over a predetermined period to arrive at the ROA ratio.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	0.89	0.52	0.57	0.41
Aramit Cement Ltd	-3.65	13.12	0.29	-8.66

Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have respective return on assets of 0.41% and -8.66% in 2022, meaning that for every 100-taka invested in assets, they made 0.41 taka in profit and 8.66 taka in loss.

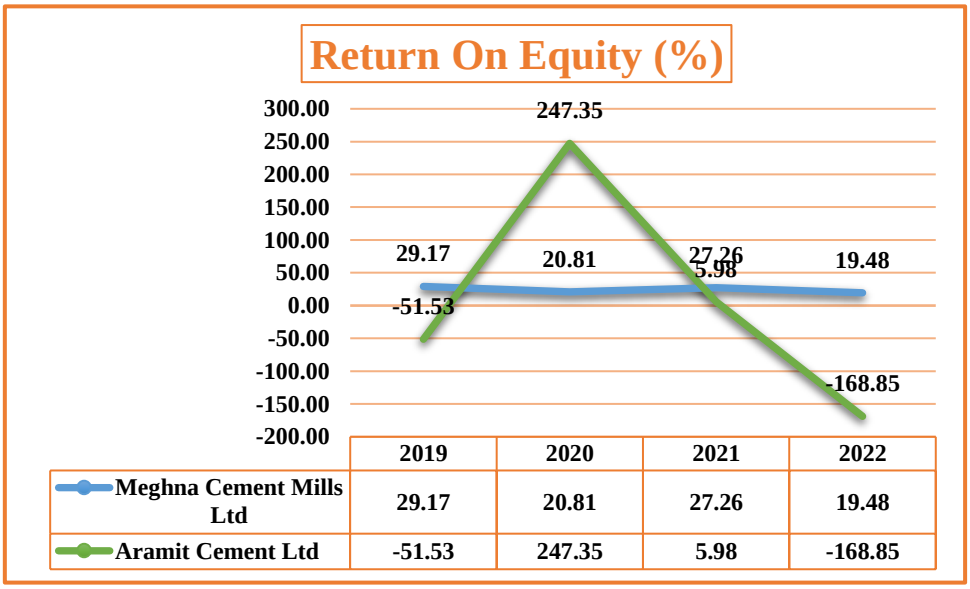
Time Series Analysis: Looking at the data, we can see that Meghna's ROA ratio dropped from 0.89 in 2019 to 0.41 in 2022, indicating a downward trend in profitability per dollar of assets. This might imply that despite the expansion of its asset base, the business is having trouble turning a profit.

Aramit's ROA ratio was negative in 2019 and 2022, on the other hand, indicating that the company's net income was lower than its total assets. However, we can observe an improvement in Aramit's ROA ratio from -3.65 in 2019 to 13.12 in 2020, indicating that the company generated a sizable profit over the course of the year. The ROA ratio, however, continued to fluctuate, falling once more to 0.29 in 2021 and turning negative once more in 2022, revealing an erratic pattern in the company's profitability per dollar of assets.

Cross Sectional Analysis: During the period of 2019 to 2022, a cross-sectional analysis of the Return on Assets (ROA) of Meghna and Aramit indicates that Meghna consistently performed better in terms of ROA than Aramit. In 2019, Meghna generated more profit per dollar of assets than Aramit, while Aramit had a negative ROA. In 2020, Meghna's ROA declined but remained positive, while Aramit's ROA improved but was still lower than Meghna's. In 2021, Meghna's ROA improved while Aramit's declined, and in 2022, both companies experienced a decline in their ROA, but Aramit faced a more significant decline compared to Meghna.

Return On Equity

Return on equity (ROE) assesses a company's profitability by revealing how much profit it makes using the capital that shareholders have invested. It is calculated by dividing the company's net income by the equity held by shareholders, and it is expressed as a percentage.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	29.17	20.81	27.26	19.48
Aramit Cement Ltd	-51.53	247.35	5.98	-168.85

Interpretation: In 2022, Meghna Cement Mills Ltd. and Aramit Cement Ltd.'s return on equity will be 19.48% and -168.85%, respectively. This means that for every 100 taka invested, the shareholders will have made 19.48 taka in profit and lost 168.85 taka.

Time Series Analysis: Meghna had an ROE of 29.17 percent in 2019, which shows that the business was producing a positive return on the money invested by shareholders, as can be seen from the table. However, the ROE fell to 20.81 percent in 2020, increased to 27.26 percent in 2021, and then fell once more to 19.48 percent in 2022. This implies that the company's profitability may have changed over time, with some years being more profitable than others.

Aramit, on the other hand, had a negative ROE of -51.53 percent in 2019, which showed that the business was not producing a return on shareholder investment. This sharply increased to 247.35 percent in 2020, indicating that the business had a successful year. The ROE decreased once more to 5.98 percent in 2021 before falling to -168.85 percent in 2022. These variations raise the possibility that Aramit's profitability is unpredictable and erratic.

Cross-Sectional Analysis: Meghna Cement Mills Ltd's ROE ratio has ranged between 19.48% and 29.17% over the last four years. Aramit Cement Ltd's ROE ratio, on the other hand, has been highly volatile, with a negative ROE of -51.53% in 2019 followed by a significantly high ROE of 247.35% in 2020. However, the ROE ratio fell to 5.98% in 2021 and -168.85% in 2022, indicating that the company has been struggling to generate profits from shareholder equity. These ratios show that Meghna Cement Mills Ltd has consistently generated profits from its shareholders' investments, whereas Aramit Cement Ltd has struggled to generate profits, with highly volatile ROE ratios that have been negative in some years.

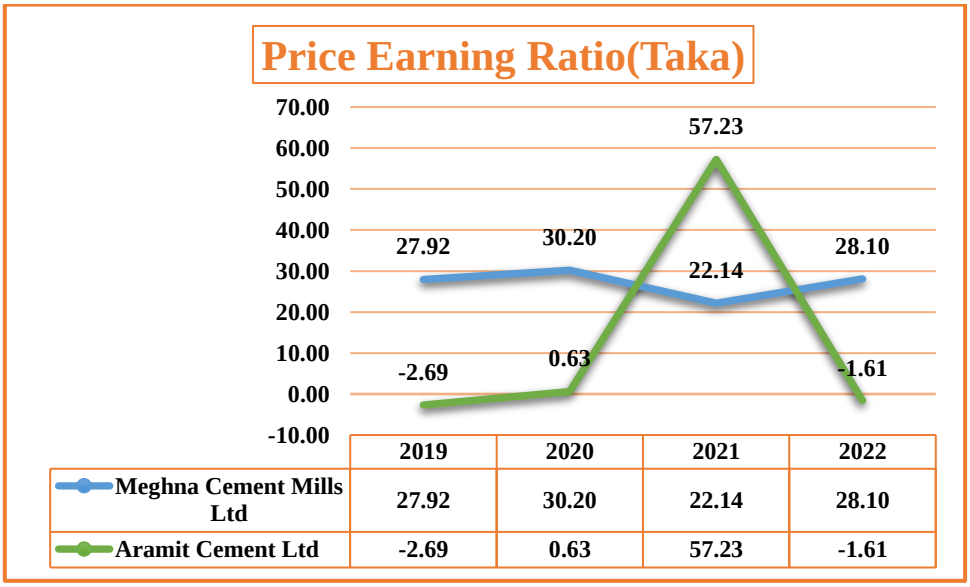
Recommendation for improvement scopes (Profitability Ratios):

Though Meghna Cement Mills Ltd has performed better compared with Aramit Cement Ltd in terms of the profitability ratios but all the profitability ratios are gradually decreasing over the time. To improve those ratios, they should increase their sales revenue by increasing its market share, launching new products, and improving customer satisfaction. This can be accomplished by investing in marketing and advertising campaigns designed to raise awareness of the company's products and services. They should invest in training and development programs to improve its employees' skills and productivity; this could result in increased output per employee and increased efficiency. They should reconsider their pricing strategy and ensure that their products are competitively priced. In order to attract more customers and increase sales, the company should consider introducing discounts and promotions.

Market Ratios

Price Earning Ratio

Price earning ratio compares its current share price to its earnings per share (EPS) is called the price-to-earnings ratio. Another name of this ratio is price multiple or earnings multiple.



	2019	2020	2021	2022
Meghna Cement Mills Ltd	27.92	30.20	22.14	28.10
Aramit Cement Ltd	-2.69	0.63	57.23	-1.61

Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. have price-earning ratios of 28.10 taka and -1.61 taka, respectively, in 2022, indicating that shareholders are willing to pay prices that are 28.10 times higher and 1.61 times lower than earnings per share.

Time Series Analysis: As we can see from above two figures Meghna Cement Mills Ltd has maintained a balanced P/E ratio over last 4 years. It was 27.92 in 2019, then slightly increased by 8%, which was 30.20 in 2020. Then again it goes down by 27% than 2020, which is 22.14 in 2021. In 2022 they performed well again, and the ratio goes up by 27% than 2021, which was 28.10 in 2022. Which means investor is willing to pay BDT 28.10 for BDT 1 of current earnings in 2022.

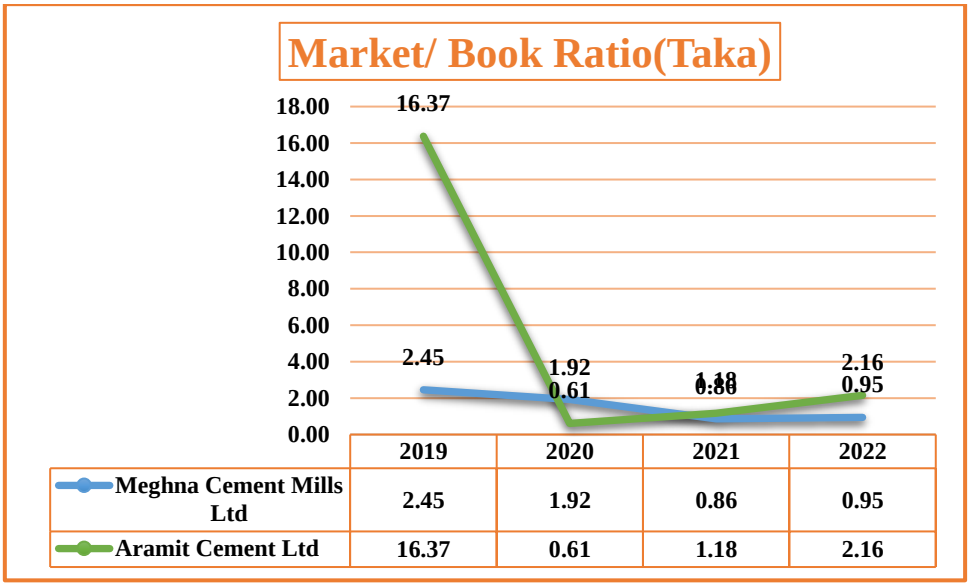
Aramit Cement Ltd: As we can notice from the above two figures that Aramit Cement Ltd has maintained an irregular and poor P/E ratio over last 4 years. It was -2.69 (which indicate negative earning in that year) times in 2019, then increased by 77%, which was 0.63 in 2020. Then again it goes up by 898% than 2020, which is 57.23 in 2021. In 2022 they performed really bad again, and the ratio goes down by 103% which indicate negative earning in that year) than 2021, which was -1.61 in 2022.

Cross-Sectional Analysis: Compared to Aramit Cement Ltd, Meghna Cement Mills Ltd really done a fantastic job in maintaining a balance and good P/E ratio over last 4 years. There was a

gap of 30.61 in 2019, the gap reduced in next two years, but in 2022 the gap was 29.71. Aramit was struggling to get positive earning and maintaining a stable share price in market, that's why we notice an irregular ups and downs in P/E ratio. On the other hand, Meghna always ensures a healthy P/E ratio in each year. Which indicates investors are willing to pay a higher share price today because of growth expectations in the future. And Aramit is most likely struggling with getting a positive earning and maintaining stable market price of shares. As a result, investors are willing to pay a lower share price today because of uncertainty in the future.

Market/Book Ratio

The Market/Book ratio assesses how much a firm is worth in the market in comparison to its book value. The price-to-book ratio is used by value investors to identify potential investments.



Interpretation: Meghna Cement Mills Ltd. and Aramit Cement Ltd. will have market-to-book ratios of 0.95 and 2.16 taka, respectively, in 2022, indicating that the market price will be 0.95 and 2.16 times greater than the book value.

Time Series Analysis: As we can see from above two figures Meghna Cement Mills Ltd has maintained a balanced Market/Book ratio over last 4 years. It was 2.45 (Which means the stock overvalued) in 2019, then slightly decreased by 22%, which was 1.92 in 2020. Then again it goes down by 55% than 2020, which is 0.86 in 2021. In 2022 ratio went up by 10% than 2021, which was 0.95 in 2022. Which means the stock is undervalued in 2022.

As we can notice from the above two figures that Aramit Cement Ltd has maintained an irregular Market/Book ratio over last 4 years. It was 16.37 (which indicate the stock was so much overvalued) in 2019, then decreased by 96%, which was 0.61 in 2020. Then again it went up by 93% than 2020, which is 1.18 in 2021. In 2022 the ratio went up by 83%, which was 2.16 in 2022. Which means the stock is overvalued in 2022.

Cross-Sectional Analysis: Compared to Aramit Cement Ltd, Meghna Cement Mills Ltd maintained a balance and good Market/Book ratio over last 4 years. Aramit was struggling to get positive earning and maintaining a stable share price in market, that's why we notice an irregular ups and downs in Market/Book ratio. Most of the time we have seen the stock pprices were overvalued. On the other hand, Meghna always ensures a stable Market/Book ratio in each year. Which indicates investors were willing to pay a fair share price in the market, which was closer to the value of Book Share Price. And Aramit is most likely struggling with getting a positive earning and maintaining stable market price of shares. As a result, investors are willing to pay a lower share price than Meghna.

Pro-forma Financial Statements

Pro forma financial statements are hypothetical financial statements that are projected for the future using previous financial information and subjective judgments. They frequently serve as a tool for budgeting, future investments, and fundraising decisions as well as for predicting a company's financial performance. We used the financial data from 2019 to 2022 to create pro forma statements for Meghna Cement Mills Ltd. and Aramit Cement Ltd. for the years 2023 to 2025. The sales growth rate for Meghna Cement Mills Ltd. and Aramit Cement Ltd., respectively, is 12.46% and 6.80%, according to our calculations.

Meghna Cement Mills Ltd

Pro-forma Income Statement Preparation:

Step 1: To calculate the pro forma statement, we first calculated Meghna Cement Mills Ltd's average sales growth rate from previous income statements. Then we multiplied the 2022 sales by the calculated sales growth of 12.46% to get the 2023 sales revenue. Then we multiplied the 2023 predicted sales by the sales growth rate to get the 2024 predicted sales revenue, and we repeated this process to get the 2025 sales revenue.

Step 2: We next subtracted the cost of goods sold (COGS) from the sales revenue, but not before excluding factory depreciation from COGS because depreciation has no direct correlation to sales growth. The expected COGS for the next three years was then obtained by simply multiplying the previous year's sales by the rate of sales growth.

Step 3: The operational income was then added, selling and administrative expenses, excluding depreciation, were subtracted, and finally, the total depreciation was subtracted to obtain the EBIT. In the coming years, operating income and selling and administrative expenses will both rise as they are strongly correlated with the pace of sales growth. Because increased production does not always translate into increased depreciation, the total amount of depreciation will remain constant over the following three years.

Step 4: After that we deducted the net finance cost and Contribution to WPPF to get the profit before income tax. Both of them will remain same for the next three years as they are not directly related to sales growth. Then we deducted the income tax expense and for calculating the tax expense we have taken the average tax rate (38.57%) from the previous five years

income statement. Multiplied the average tax rate with the profit before income tax of the upcoming years to get the total tax expense and after deducting the tax we get the net income. For calculating the dividend pay-out rate, we were supposed to take the dividend pay-out rate of 2022 but due to extremely higher dividend pay-out rate in 2022 of around 367.83%, we are assuming that Meghna Cement Mills Ltd will pay dividend following the 2021 dividend pay-out rate of 16.82%. After deducting the dividend, we get the addition to retain earnings.

Assumption: Because they paid a very high dividend in 2022 (367.83%), we are assuming that Meghna Cement Mills Ltd. will follow the dividend pay-out rate of 2021 (16.82%) in the upcoming years.

Pro-forma Balance Sheet Preparation:

Step 1: For preparing the pro-forma balance sheet first we have multiplied the previous year's non-current asset items with the sales growth rate which will give us the predicted non-current assets of 2023.

Non-Current Assets:

As sales increases Meghna Cement Mills Ltd may need to make investments in more property, plant and equipment to sustain its operations. If their sales increase quickly, they might need to upgrade their manufacturing machinery or increase their facility size to meet demand. The value of the company's non-current assets may rise as a result. Investments in intangible assets may result from increasing sales. Meghna Cement Mills Ltd may spend money on R&D to develop new goods or buy a patent for a novel technique. These intangible assets may be included in the company's non-current assets on the balance sheet and may promote future sales growth.

Step 2: Then we multiplied the current asset items with sales growth rate to get the predicted current asset of 2023 and onwards.

Current Assets:

Meghna Cement Mills Ltd may need to keep more inventory on hand to complete client orders if its sales increase due to an increase in demand. The amount of trade and other receivables will rise as well, representing the rise in the sum of money that customers owe the business.

In some cases, they could get money in advance from clients in the form of deposits, advances, or prepayments. The quantity of deposits, prepayments, and advances may rise together with sales as a result of growing client demand and readiness to pay in advance. Meghna Cement Mills Ltd.'s taxable income may rise along with its sales, which could lead to bigger advance income tax payments that must be made before the actual tax liability is due. Last but not least, if sales increase, Meghna Cement Mills Ltd may produce more cash from its activities, which can raise the balance of cash and cash equivalents on the proforma balance sheet.

Step 3: Then add the total noncurrent assets and total current assets to get the Total asset.

Step 4: We have calculated the total Shareholders equity. All the entries of the shareholders equity will remain constant in the next years other than the retain earnings.

Stockholders' Equity:

Any rise in sales will have no impact on the fixed share capital of Meghna Cement Mills Ltd. Its value can only be changed if the company decides to issue additional shares. It was decided upon during the original public offering or subsequent share issuance. Similar to the fixed dividend payments for Preference shares, these payments won't vary as sales increase. The General Reserve, which is used to reserve a portion of earnings for different uses like emergency funding, expansion plans, or dividend payments, is decided upon by the company's management and is unrelated to sales growth. Any adjustments to the reserve made when a company's assets are revalued to match market value will not be shown in the proforma statement for sales growth. The proforma statement for sales growth will not reflect any changes in the reserve created when a company's assets are revalued to reflect their current market value. On the other hand, Retained Earnings represent the portion of net income that a company retains for future use after paying dividends to its shareholders. As a result, if Meghna Cement Mills Ltd experiences sales growth, its net income will likely increase, leading to an increase in Retained Earnings.

Step 5: In this step we have calculated the total non-current liabilities. All the entries of noncurrent liabilities remain the same because they don't have any direct relationship with sales growth.

Non-current Liabilities:

Long term borrowing, Gratuity Payable, and Deferred tax liabilities are the non-current liabilities that are not affected by changes in sales in the proforma statement. As sales increase, the amounts of these liabilities will remain the same, as they are determined by factors unrelated to the company's sales or revenue. Long term borrowing is a fixed amount that a company borrows for an extended period and is not dependent on the level of sales. Similarly, Gratuity Payable is a liability that is determined by the company's employee compensation policies and not impacted by sales growth. Lastly, Deferred tax liabilities arise due to the temporary differences between accounting and tax treatment of assets and liabilities, and their amounts are determined by accounting standards and tax regulations, rather than by sales or revenue.

Step 6: Calculation of current liabilities is done in this step among them certain liabilities will directly increase as a result of higher sales, while others won't. The following lists the causes of these various consequences. The reasons for these varying effects are provided below.

Current Liabilities:

Short-term borrowings: As sales increase, Meghna Cement Mills Ltd may need to borrow more funds in the short term to finance inventory or production needs, which would increase short-term borrowings.

Trade payable: As sales increase, Meghna Cement Mills Ltd may purchase more goods and services on credit, which would increase trade payable.

Advanced received against sales: As sales increase, Meghna Cement Mills Ltd may receive more advances from customers for future deliveries or services, which would increase the advanced received against sales.

Payable for other expenses: As sales increase, Meghna Cement Mills Ltd may have higher expenses that have not yet been paid, such as salaries, rent, and utilities, which would increase payable for other expenses.

Income tax provision: As sales increase, Meghna Cement Mills Ltd taxable income may also increase, resulting in a higher income tax provision.

However, sales growth rate would not necessarily impact the following entries:

Long-term borrowing - Current portion: This represents the current portion of long-term debt and is usually a fixed amount owed to lenders that does not fluctuate based on sales performance.

Payable for other finance: This represents any other finance-related payables, which would not be directly impacted by sales growth rate.

Unclaimed dividend: This represents any unpaid dividends to shareholders, which would not be directly impacted by sales growth rate.

Provision for WPPF: This represents any provision for workers' profit participation fund and is typically not impacted by sales growth rate.

Step 7: In the last step we add stockholders' equity, non-current liabilities and Current liabilities to get the total liability and stockholders' equity.

Aramit Cement Ltd

Pro-forma Income Statement Preparation:

Step 1: Preparing a sales forecast for the upcoming time period is the first stage in the sales forecasting process. This prediction is supported by previous year's sales growth rate which is 6.70%. But due to a huge decline in 2022 sales of Aramit Cement Ltd, they were supposed to have negative sales growth rate. For making this report work easier we only considered the sales growth rate from year 2018 to 2021.

Step 2: Then we deducted the direct cost of producing products which is also known as the cost of sales. It covers direct labor, raw supplies, and additional connected costs. This cost of sales will also increase along with sales growth.

Step 3: We determined the gross profit by subtracting the cost of sales from the total revenue/ total sales

Step 4: Then we tried to predict the operating expenses which includes costs like salary, rent, utilities, and marketing that are incurred indirectly as a result of running a business. Based on prior experience and anticipated sales expansion, operating expenses are forecasted to be increased in the upcoming years.

Step 5: Then, as depreciation is not anticipated to rise in the coming years, we calculated it. Hence, the pro-forma statement's depreciation for the preceding year will not change.

Step 6: When operating costs and depreciation are subtracted from gross profit, operational profit, also known as EBIT (Earnings Before Interest and Taxes), is obtained.

Step 7: After that, we calculated the Net Financial Cost. It is determined by subtracting interest income from interest expenses. Net finance cost will stay the same as it was last year because it is not directly tied to sales growth.

Step 8: The operating profit was then subtracted from the net finance cost to arrive at the profit before other income calculation.

Step 9: Then we determine other operating income. As Aramit Cement Ltd. performs more operations to boost their sales, and depending on the growth in sales, this operating income will also rise.

Step 10: The WPPF contribution and profit sharing are then subtracted to obtain the profit before income tax. We discovered that Aramin Cement Ltd did not contribute to WPPF and share profit from the prior income statements. So, we are making the assumption that they won't contribute in the near future either.

Step 11: Lastly, we deduct the Tax expense to get the total comprehensive income. For calculating the tax rate, we have taken the average tax rate of previous four years.

Assumption: We can see from the historical financial statement that Aramit Cement Ltd. has been paying income tax despite having lost money over the last few years, therefore we are making the assumption that they will continue to do so even if they are unable to make any profit.

Pro-forma Balance Sheet Preparation:

Step 1: The non-current asset items from the previous year serve as the first benchmark when calculating the predicted non-current assets. Then, a sales growth rate is multiplied to these non-current asset items from the prior year to get the predicted non-current assets.

Non-current Assets:

Aramit Cement Ltd may need to make greater investments in property, plant, and equipment to handle the growth when sales expand. For instance, they may need to invest in new equipment to boost output in order to keep up with the rising demand for its goods. The asset's value has increased on the balance sheet as a result of the investment in property, plant, and equipment.

Similar to this, they may need to engage in ongoing capital projects in order to improve sales. This can entail making investments in the construction of new factories, the expansion of existing ones, or the improvement of industrial procedures to boost productivity. The higher value of this asset on the balance sheet reflects the increased investment in capital work in progress.

The Investment account is updated if further investments in securities or other financial instruments are required as a result of an increase in sales. To diversify their investment portfolio or to make use of extra cash reserves, Aramit Cement Ltd may invest in stocks, bonds, or other financial instruments. An increase in sales would bring in more cash, which could then be used to fund more investments, increasing the Investment account.

Step 2: The current asset items were multiplied by the sales growth rate in the following step of creating the pro-forma balance sheet in order to estimate the expected current assets for the years 2023, 2024 and 2025.

Current assets:

Inventory: A rise in sales typically signals a rise in demand for the goods of Aramit Cement Ltd. They will need to keep additional inventory on hand to accommodate this demand.

Trade receivables: More credit sales are generated by rising sales, which raises trade receivables. Consumers might not pay for the products right away, and Aramit Cement Ltd might give them credit terms.

Advances, deposits, and prepayments: Consumers can put down a deposit or make an advance payment to reserve products that Aramit Cement Ltd will provide later. More advance payments may be made as a result of increased sales, which would boost this entry.

Due from associated companies: An increase in sales may result in an increase in transactions if Aramit Cement Ltd has any subsidiaries.

Other Receivables: This item includes all other receivables, whether they are commercial or owed to affiliated businesses. Other receivables, such as refunds, rebates, or other consumer claims, may rise in response to an increase in sales.

Cash and cash equivalents: As a result of Aramit Cement Ltd receiving more cash payments from consumers, an increase in sales may lead to an increase in cash and cash equivalents.

Step 3: The total asset for the pro-forma balance sheet was then calculated by adding the total current assets and total non-current assets.

Step 4: We then added the anticipated values of common shares, share premium and reserve & surplus to determine the total shareholders' equity. None of the entries in the shareholders' equity are likely to change significantly in the upcoming year, thus we projected that their values would not change.

Stockholders' Equity:

Share capital is the money that Aramit Cement Ltd has raised by issuing shares to shareholders. Unless they decide to issue more shares, this sum is set at the moment of incorporation and doesn't change.

Share premium is the sum of money Aramit Cement Ltd receives when its shares are issued that is greater than their face value. Also, this sum is decided upon at the time of incorporation or whenever extra shares are issued. As sales are unrelated to the company's revenue, they have no direct effect on the share premium.

Reserves and surplus are profits earned by a company that have not been distributed to shareholders as dividends. These funds are kept by the company and used for a variety of purposes, including future investments, expansion plans, and meeting contingencies. Increased sales may result in higher profits, which can be added to reserves and surplus. As we are

assuming that Aramit Cement Ltd will generate net loss in the upcoming years, so there will be no addition to reserve and surplus.

Step 5: We calculated the total non-current liabilities, which are unaffected by sales growth because they are determined by factors other than sales, such as financing agreements, tax regulations, and employee benefit plans. As a result, the non-current liabilities entries remain unchanged.

Non-current Liabilities:

Term loans and lease finance: These are long-term liabilities that are unaffected by changes in sales. Term loan and lease finance amounts are typically determined by the financing agreement and the borrower's creditworthiness, rather than by sales.

Provision for Deferred Tax: This is a provision made to account for potential future tax liabilities. Sales growth has no direct impact on the provision for deferred tax because it is based on estimates of future tax liabilities and tax rates, which are typically unrelated to sales.

Provision for Employee Retiral Gratuity: This is a liability resulting from the company's obligation to pay a gratuity to its employees upon retirement. The provision for retiral gratuity is not directly affected by sales because an increase in sales does not necessarily increase the company's obligation to pay gratuity to its employees.

Step 6: Entails calculating current liabilities, which are affected differently as sales increase. Some liabilities, such as accounts payable, taxes payable, and accrued expenses, may directly increase as sales increase, whereas others, such as short-term loans and lease obligations, may not.

Current Liabilities:

Current Portion of Term Loan & Lease Finance: If Aramit Cement Ltd.'s sales rise, it might need more working capital to finance its operations. This might result in a rise in short-term borrowing to meet the greater cash requirements. The Current Portion of Term Loan & Lease Financing would rise as a result.

Creditors and Accruals: If sales rise, they could have to buy more inventory or raw materials, which could result in a rise in accounts payable. Additionally, if a business has larger sales

volume, it may have higher expenses that are incurred but not yet paid, such as payroll, rent, and utilities.

Provision for Income Tax: If the company's sales rise, its taxable income rises as well, resulting in a bigger income tax provision.

Short Term Loan: Similar to the Current Part of Term Loan & Lease Financing, a rise in sales may necessitate a higher short-term borrowing amount to meet the resulting rise in cash requirements.

Due to Associated Companies: When the sales grow, they might conduct more business with its affiliated companies, which would increase the sum owed to them.

However, the following items in the Current Liabilities column of a proforma balance sheet might not be materially impacted by the rate of sales growth

Current Portion of Redeemable Debentures: This entry shows how much of the short-term debentures are fixedly scheduled to be redeemed, which is not affected by sales growth.

Provision for WPP & WF: In general, the growth rate of sales has little impact on this entry, which represents provisions made for warranties, product warranties, and product returns.

Unclaimed Dividend: This entry reflects dividends that have been declared but have not yet been collected by shareholders. The rate of sales growth has little bearing on this entry.

Step 7: To calculate the total liability and stockholders' equity, we add the stockholders' equity, non-current liabilities, and current liabilities.

EFN Calculation

EFN is the amount of outside capital a business needs to secure in order to achieve its anticipated growth rate. Businesses frequently utilize EFN estimates to evaluate how much extra funding, in the form of equity or debt finance, is required to support their expansion goals. A company's financial performance and overall financial health can be evaluated using EFN.

Meghna Cement Mills Ltd

EFN 2023

EFN (2023) = Total Asset (2023)- Total Liability & Stockholders' Equity (2023)

= 15,141,998,250 – 14,399,473,092

= 742,525,158

Debt/ Equity Ratio (2022) = 7.12: 1

Portion of EFN Financed from Debt = $742,525,158 * \frac{7.12}{8.12}$

= 651,081,173

Portion of EFN Financed from Equity = $742,525,158 * \frac{1}{8.12}$

= 91,443,984.98

Total Liability & Stockholders' Equity (2023) = 14,399,473,092

If we follow the previous years Debt/ Equity ratio then

Total debt without EFN= $14,399,473,092 * \frac{7.12}{8.12}$

=12,626,138,967

Total equity without EFN = $14,399,473,092 * \frac{1}{8.12}$

= 1773334124

Total debt with EFN = 12,626,138,967+ 651,081,173

= 13,277,220,140

Total Equity with EFN = 1773334124+ 91,443,984.98

= 1864778109

New Debt/ Equity ratio (2023) = $\frac{\textbf{Total debt with EFN}}{\textbf{Total Equity with EFN}}$

$= \frac{\mathbf{13,277,220,140}}{\mathbf{1864778109}}$

=7.12:1

Increase in Total Equity of 2023 = Total Equity with EFN – Total Equity in Pro-forma Statement

= 1864778109 - 1841463594

= 23,314,515

Increase in Total Debt of 2023 = Total Debt with EFN – Total Debt in Pro-forma Statement

= 13,277,220,140 - 12,558,009,498

= **719,210,642**

EFN (2023) = Increase in Total Equity of 2023 + Increase Total in Debt of 2023

= 23,314,515 + 719,210,642

= **742,525,157**

To maintain a constant debt to equity ratio, Meghna Cement Mills Ltd will need to increase their debt by 719,210,642 takas and concurrently increase their equity by 23,314,515 takas in the year 2023.

EFN 2024

EFN (2024) = Total Asset (2024)- Total Liability & Stockholders' Equity (2024)

= **17,028,691,232** – **15,499,279,331**

= 1,529,411,901

Debt/ Equity Ratio (2022) = 7.12: 1

Portion of EFN Financed from Debt = $1,529,411,901 * \frac{7.12}{8.12}$

= 1,341,060,682

Portion of EFN Financed from Equity = 1,529,411,901 * $\frac{1}{8.12}$

= 188,351,219

Total Liability & Stockholders' Equity (2024) = 15,499,279,331

If we follow the previous year's Debt/ Equity ratio then

Total debt without EFN = 15,499,279,331* $\frac{7.12}{8.12}$

= 13,590,501,088

Total equity without EFN = 15,499,279,331* $\frac{1}{8.12}$

= 1,908,778,243

Total debt with EFN = 13,590,501,088 + 1,341,060,682

= 14,931,561,770

Total Equity with EFN = 1,908,778,243 + 188,351,219

= 2,097,129,462

New Debt/ Equity ratio (2024) = $\frac{\textbf{Total debt with EFN}}{\textbf{Total Equity with EFN}}$

$= \frac{\mathbf{14{,}931{,}561{,}770}}{\mathbf{2{,}097{,}129{,}462}}$

= 7.12:1

Increase in Total Equity of 2024 = Total Equity with EFN – Total Equity in Pro-forma Statement

= 2,097,129,462 - 2,094,993,821

= 2,135,641

Increase in Total Debt of 2024 = Total Debt with EFN – Total Debt in Pro-forma Statement

= 14,931,561,770 - 13,404,285,510

= 1,527,276,260

EFN (2024) = Increase in Total Equity of 2024 + Increase in Total Debt of 2024

= 2,135,641 + 1,527,276,260

= 1,529,411,901

To maintain a constant debt to equity ratio, Meghna Cement Mills Ltd will need to increase their debt by 1,527,276,260 takas and concurrently increase their equity by 2,135,641 takas in the year 2024.

EFN 2025

EFN (2025) = Total Asset (2025)- Total Liability & Stockholders' Equity (2025)

= 19,150,466,160– 16,784,278,474

= 2,366,187,686

Debt/ Equity Ratio (2022) = 7.12: 1

Portion of EFN Financed from Debt = $2{,}366{,}187{,}686 * \frac{7.12}{8.12}$

= 2,074,785,262

Portion of EFN Financed from Equity = $2{,}366{,}187{,}686 * \frac{1}{8.12}$

= 291,402,424

Total Liability & Stockholders' Equity (2025) = 16,784,278,474

If we follow the previous year's Debt/ Equity ratio then

Total debt without EFN = $16{,}784{,}278{,}474 * \frac{7.12}{8.12}$

= 14,717,249,105

Total equity without EFN = $16{,}784{,}278{,}474 * \frac{1}{8.12}$

= 2,067,029,369

Total debt with EFN = 14,717,249,105 + 2,074,785,262

= 16,792,034,367

Total Equity with EFN = 2,067,029,369 + 291,402,424

= 2,358,431,793

New Debt/ Equity ratio (2025) = $\frac{\textbf{Total debt with EFN}}{\textbf{Total Equity with EFN}}$

= $\frac{\textbf{16,792,034,367}}{\textbf{2,358,431,793}}$

= 7.12:1

Decrease in Total Equity of 2025 = Total Equity in Pro-forma Statement - Total Equity with EFN

= 2,428,270,962 - 2,358,431,793

= 69839169

Increase in Total Debt of 2025 = Total Debt with EFN – Total Debt in Pro-forma Statement

= 16,792,034,367 - 14,356,007,512

= 2,436,026,855

EFN (2025) = Increase in Total Debt of 2025 - Decrease in Total Equity of 2025

= 2,436,026,855 - 69839169

= 2,366,187,686

To maintain a constant debt to equity ratio, Meghna Cement Mills Ltd will need to increase their debt by 2,436,026,855 takas and concurrently decrease their equity by 69,839,169 takas in the year 2025.

Aramit Cement Ltd

EFN 2023

EFN (2023) = Total Asset (2023)- Total Liability & Stockholders' Equity (2023)

= 7,054,136,181– 6,916,294,862

= 137,841,319

Debt/ Equity Ratio (2022) = 14.49: 1

Portion of EFN Financed from Debt = 137,841,319 * $\frac{14.49}{15.49}$

= 128,942,590

Portion of EFN Financed from Equity = 137,841,319 * $\frac{1}{15.49}$

= 8,898,729

Total Liability & Stockholders' Equity (2023) = 6,916,294,862

If we follow the previous year's Debt/ Equity ratio then

Total debt without EFN= 6,916,294,862* $\frac{14.49}{15.49}$

= 6,469,794,225

Total equity without EFN = 6,916,294,862* $\frac{1}{15.49}$

= 446,500,637

Total debt with EFN = 6,469,794,225 + 128,942,590

= 6,598,736,815

Total Equity with EFN = 446,500,637 + 8,898,729

= 455,399,366

New Debt/ Equity ratio (2023) = $\frac{\textbf{Total debt with EFN}}{\textbf{Total Equity with EFN}}$

$= \frac{6,598,736,815}{455,399,366}$

= 14.49: 1

Increase in Total Equity of 2023 = Total Equity with EFN – Total Equity in Pro-forma Statement

= 455,399,366 - 426,358,855

= 29,040,511

Increase in Total Debt of 2023 = Total Debt with EFN – Total Debt in Pro-forma Statement

= 6,598,736,815 - 6,489,936,007

= 108,800,808

EFN (2023) = Increase in Total Equity of 2023 + Increase Total in Debt of 2023

= 29,040,511 + 108,800,808

= 137,841,319

In order to uphold a consistent debt to equity ratio, Aramit Cement Ltd must augment their debt by 108,800,808 takas while simultaneously augmenting their equity by 29,040,511 takas during the year 2023.

EFN 2024

EFN (2024) = Total Asset (2024)- Total Liability & Stockholders' Equity (2024)

= 7,533,817,441– 7,248,761,593

= 285,055,848

Debt/ Equity Ratio (2022) = 14.49: 1

Portion of EFN Financed from Debt = $285,055,848 * \frac{14.49}{15.49}$

= 266,653,275.50

Portion of EFN Financed from Equity = $285,055,848 * \frac{1}{15.49}$

= 18,402,572.50

Total Liability & Stockholders' Equity (2024) = 7,248,761,593

If we follow the previous year's Debt/ Equity ratio then

Total debt without EFN = $7,248,761,593 * \frac{14.49}{15.49}$

= 6,780,797,643

Total equity without EFN = $7,248,761,593 * \frac{1}{15.49}$

= 467,963,950

Total debt with EFN = 6,780,797,643+ 266,653,275.50

= 7047450918.5

Total Equity with EFN = 467,963,950+ 18,402,572.50

= 486366522.5

New Debt/ Equity ratio (2024) = $\frac{\textbf{Total debt with EFN}}{\textbf{Total Equity with EFN}}$

= $\frac{7047450919}{486366522.5}$

= 14.49: 1

Increase in Total Equity of 2024 = Total Equity with EFN – Total Equity in Pro-forma Statement

= 486366522.5- 426,358,855

= 60007667.5

Increase in Total Debt of 2024 = Total Debt with EFN – Total Debt in Pro-forma Statement

= 7047450918.5- 6,822,402,738

= 225,048,180.5

EFN (2024) = Increase in Total Equity of 2024 + Increase in Total Debt of 2024

= 60007667.5+ 225,048,180.5

= 285,055,848

In order to uphold a consistent debt to equity ratio, Aramit Cement Ltd must augment their debt by 225,048,180.5 takas while simultaneously augmenting their equity by 60007667.5 takas during the year 2024.

EFN 2025

EFN (2025) = Total Asset (2025)- Total Liability & Stockholders' Equity (2025)

= 8,046,117,026– 7,603,836,062

= 442,280,964

Debt/ Equity Ratio (2022) = 14.49: 1

Portion of EFN Financed from Debt = 442,280,964* $\frac{14.49}{15.49}$

= 413728287.18

Portion of EFN Financed from Equity = 442,280,964* $\frac{1}{15.49}$

= 28552676.82

Total Liability & Stockholders' Equity (2025) = 7,603,836,062

If we follow the previous year's Debt/ Equity ratio then

Total debt without EFN = 7,603,836,062* $\frac{14.49}{15.49}$

= 7112949292.34

Total equity without EFN = 7,603,836,062* $\frac{1}{15.49}$

= 490886769.66

Total debt with EFN = 7112949292.34+ 413728287.18

= 7,526,677,580

Total Equity with EFN = 490886769.66+ 28552676.82

= 519,439,446

New Debt/ Equity ratio (2025) = $\frac{\textbf{Total debt with EFN}}{\textbf{Total Equity with EFN}}$

$= \frac{\mathbf{7{,}526{,}677{,}580}}{\mathbf{519{,}439{,}446}}$

= 14.49:1

Increase in Total Equity of 2025 = Total Equity with EFN - Total Equity in Pro-forma Statement

= 519,439,446- 426,358,855

= 93080591

Increase in Total Debt of 2025 = Total Debt with EFN – Total Debt in Pro-forma Statement

= 7,526,677,580- 7177477207

= 349200373

EFN (2025) = Increase in Total Debt of 2025 + Increase in Total Equity of 2025

= 349200373 + 93080591

= 442280964

In order to uphold a consistent debt to equity ratio, Aramit Cement Ltd must augment their debt by 349200373 takas while simultaneously augmenting their equity by 93080591 takas during the year 2025.

Cashflow Calculation

Cash flow is a crucial tool in financial analysis since it offers details on a company's cash inflows and expenditures over a certain time period. To determine the cash flow of both companies, we will examine their pro-forma financial statements.

Meghna Cement Mills Ltd

Cashflow 2023

OCF= EBIT + Depreciation – Taxes

= 689,113,018 + 204,530,142 - 118,610,057

= 775,033,103

Change in Net Capital Spending = Ending Net Fixed Asset (2023) – Beginning Net Fixed Asset (2022) + Depreciation (2023)

= 9,568,670,812 - 8,508,510,414+ 204,530,142

= 1,264,690,540

Change in Net Working Capital= Ending [2023] (Current Asset – Current Liability) – Beginning [2022] (Current Asset – Current Liability)

= (5,573,327,438 - 7,379,556,773) - (4,955,830,907 - 6,627,043,870)

= -135,016,372

CFFA= OCF – Change in Net Capital Spending – Change in Net Working Capital

= 775,033,103- 1,264,690,540 – (-135,016,372)

= -354,641,065

From the calculation we can see that Meghna Cement Mills Ltd. will have a negative cash flow from assets of -354,641,065 taka in 2023, meaning that the firm will have a positive cash inflow but a negative cash outflow from its assets. This suggests that they have incurred a net loss on the cash it received from its operating and investment operations in 2023.

Cashflow 2024

OCF= EBIT + Depreciation – Taxes

= 800,460,955+ 204,530,142 - 150,502,864

= 854,488,233

Change in Net Capital Spending = Ending Net Fixed Asset (2024) – Beginning Net Fixed Asset (2023) + Depreciation (2024)

= 10,760,927,195 - 9,568,670,812 + 204,530,142

= 1,396,786,526

Change in Net Working Capital= Ending [2024] (Current Asset – Current Liability) – Beginning [2023] (Current Asset – Current Liability)

= (6,267,764,037- 8,225,832,785) - (5,573,327,438 - 7,379,556,773)

= -151,839,413

CFFA= OCF – Change in Net Capital Spending – Change in Net Working Capital

= 854,488,233- 1,396,786,526– (-151,839,413)

= -390,458,880

As per the computation, Meghna Cement Mills Ltd. is projected to exhibit a positive cash inflow but a negative cash outflow from its assets in 2024, resulting in a negative cash flow from assets amounting to -390,458,880 taka. This indicates that the company incurred a net loss on the cash generated from its operational and investment activities in 2024.

Cashflow 2025

OCF= EBIT + Depreciation – Taxes

= 925,682,846 + 204,530,142 - 186,369,515

= 943,843,472

Change in Net Capital Spending = Ending Net Fixed Asset (2025) – Beginning Net Fixed Asset (2024) + Depreciation (2025)

= 12,101,738,723- 10,760,927,195+ 204,530,142

= 1,545,341,670

Change in Net Working Capital= Ending [2025] (Current Asset – Current Liability) – Beginning [2024] (Current Asset – Current Liability)

= (7,048,727,436- 9,177,554,787) - (6,267,764,037 - 8,225,832,785)

= -170,758,603

CFFA= OCF – Change in Net Capital Spending – Change in Net Working Capital

= 943,843,472- 1,545,341,670 - (-170,758,603)

= -430,739,595

As per the computation, Meghna Cement Mills Ltd. is expected to report a positive cash inflow but a negative cash outflow from its assets in 2025, resulting in a negative cash flow from assets of -430,739,595 taka. This signifies that the company's cash inflow generated by its operational and investment activities in 2025 would be exceeded by the cash outflow from its assets. Hence, the company is likely to incur a net loss on the funds received in 2025.

Aramit Cement Ltd

Cashflow 2023

OCF= EBIT + Depreciation – Taxes

= (-225,266,092) + 76,708,082 - 63,623,159

= -212,181,169

Change in Net Capital Spending = Ending Net Fixed Asset (2023) – Beginning Net Fixed Asset (2022) + Depreciation (2023)

= 2,524,744,496 - 2,363,992,974+ 76,708,082

= 1,264,690,540

Change in Net Working Capital= Ending [2023] (Current Asset – Current Liability) – Beginning [2022] (Current Asset – Current Liability)

= (4,529,391,685- 4,928,356,594) - (4,241,003,450- 4,617,058,156)

= -22,910,203

CFFA= OCF – Change in Net Capital Spending – Change in Net Working Capital

= -212,181,169- 237,459,604– (-22,910,203)

= -426,730,570

The negative value of -426,730,570 takas for Aramit Cement Ltd's cash flow from assets in 2023, as computed from the proforma statement, implies that the company has a net cash outflow resulting from its operating and investing activities during that year. This indicates that Aramit Cement Ltd has spent more cash on its operations and investments than it has generated from those activities.

Cashflow 2024

OCF= EBIT + Depreciation – Taxes

= -235,307,290+ 76,708,082 - 63,949,037

= -222,548,245

Change in Net Capital Spending = Ending Net Fixed Asset (2024) – Beginning Net Fixed Asset (2023) + Depreciation (2024)

= 2,696,427,123- 2,524,744,496+ 76,708,082

= 248,390,709

Change in Net Working Capital= Ending [2024] (Current Asset – Current Liability) – Beginning [2023] (Current Asset – Current Liability)

= (4,837,390,319- 5,260,823,325)- (4,529,391,685- 4,928,356,594)

= -24,468,098

CFFA= OCF – Change in Net Capital Spending – Change in Net Working Capital

= -222,548,245- 248,390,709– (-24,468,098)

= -446,470,856

The proforma statement indicates that Aramit Cement Ltd's cash flow from assets in 2024 is -446,470,856 takas, which is negative. This negative value implies that the company's operating and investing activities have resulted in a net cash outflow during the year. In other words, Aramit Cement Ltd has expended more cash on its operations and investments than it has generated from those activities, suggesting that the company may be facing financial difficulties.

Cashflow 2025

OCF= EBIT + Depreciation – Taxes

= -246,027,221+ 76,708,082 - 64,297,465

= -233,616,604

Change in Net Capital Spending = Ending Net Fixed Asset (2025) – Beginning Net Fixed Asset (2024) + Depreciation (2025)

= 2,879,784,166- 2,696,427,123+76,708,082

= 260,065,126

Change in Net Working Capital= Ending [2025] (Current Asset – Current Liability) – Beginning [2024] (Current Asset – Current Liability)

= (5,166,332,860 - 5,615,897,794) - (4,837,390,319- 5,260,823,325)

= -26,131,928

CFFA= OCF – Change in Net Capital Spending – Change in Net Working Capital

= -233,616,604- 260,065,126- (-26,131,928)

= -467,549,801

In 2024, Aramit Cement Ltd had a negative cash flow from assets of -467,549,801 takas, as shown by the proforma statement. This indicates that they spent more on ongoing expenses and investments than it did on revenue during the year. As a result, the negative cash flow raises the possibility that Aramit Cement Ltd is facing financial difficulties.

References

Meghna Cement Mills Ltd. (2023, April 9). *Annual Reports - Meghna Cement Mills Ltd*. https://www.meghnacement.com/annual-reports/

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