**Report on**

“ Effects of performance of Bashundhara Paper Mills Ltd. and Sonali Paper & Board Mills Ltd. “

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**Executive Summary**

# Executive Summary

The two oldest paper producing companies in Bangladesh are Bashundhara Paper Mills Ltd. and Sonali Paper & Board Mills Ltd. It is currently Bangladesh's biggest manufacturer of paper mills. Working capital management is an essential component of every business, even for a large one like Bashundhara and Sonali paper mills ltd. It is the company's core that keeps all other parts of the business operating.

The term "working capital management" describes making sure there is enough cash on hand to cover short-term obligations as well as daily costs (such as hiring staff and buying supplies). The business will cease operations if it runs out of cash. Management of working capital is divided into three components.

1. **Cash management:** Determining the amount of cash required, the amount that would be in excess or deficit at a given time, the amount that can be invested from the surplus, etc.
2. **Debtor Management:** Establishing policies for sales terms, deciding whether to extend credit, etc.
3. **Inventory management:** It includes projecting how much product should be produced and figuring out an efficient order quantity to reduce costs.

Ratio analysis was employed to determine the working capital management effectiveness of Bashundhara Paper Mills Ltd. and Sonali Paper & Board Mills Ltd. The quick ratio and current ratio were used to gauge the firm's liquidity. The management of account receivables is a key indicator of a company's debtor management. The number of times a company sells its goods is determined by its inventory turnover.

We also overcame the shortcomings of earlier ratios by using contemporary ratio analysis. Our investigation reveals that the company's liquidity is not great. why their market value is being impacted. In conclusion, we offered a few potential concepts based on our investigation.

**Chapter – 01**

# Introduction

**INTRODUCTION OF THE REPORT**

A company's short-term assets and short-term obligations are reflected in working capital management. Through monitoring and optimizing the use of current assets and liabilities, working capital management seeks to make better use of a company's resources. To maximize profits while meeting short-term debt obligations and operating expenditures, the objective is to maintain enough cash flow.

For short-term necessities like buying raw materials, paying employees, and other daily costs, etc., every business requires money. They are referred to as working capital. Ensuring the organization can sustain daily operations and has adequate funds for short-term and daily responsibilities is the aim of working capital management.

**SCOPE OF THE STUDY**

The working capital management of Sonali Paper and Board Mills Ltd. and Bashundhara Paper Mills Ltd. is covered in the report. There is an overview of the company that includes its history and details first. Important information regarding working capital management was then covered in the later section. Lastly, using financial ratio analysis, the research analyzes the effectiveness of the organizations' working capital management.

**OBJECTIVES OF THE STUDY**

* To study the sources and uses of the working capital.
* To gather practical knowledge about working capital management and procedures.
* To study the liquidity position through various working capital related ratios.
* To study the working capital components such as receivables accounts, Cash management.
* To make suggestions based on the finding of the study.

**LIMITATIONS OF THE STUDY**

We encountered several challenges while preparing the report, which affected its overall quality. The key limitations were:

1. The company's confidentiality policy restricted our access to data.

2. Due to quarantine measures, we were unable to gather field data through office visits.

3. Our team interactions were also significantly limited because of the quarantine.

Despite these challenges, we made every effort to ensure the report was as reliable as possible.

**METHODOLOGY**

**Primary data collection**

Although this is an analytical report, it’s unfortunate that we were able to use very little primary data. The primary reason for this limitation was our distance from the capital, which prevented us from collecting data directly. As a result, we had to rely mainly on secondary data.

**Secondary data collection**

Secondary data was collected from following way:

**Books**

We used our reference book for the guideline of this report.

**FGD (Focus Group Discussion):**

It’s not possible to complete a report like this on your own. Our group members worked exceptionally well together, with everyone putting in their best effort to ensure the report was completed efficiently. We utilized internet data for this report, gathering ten years' worth of information from the websites of relevant companies.

**Analysis**

1.The initial step of the project was studying about the company and then evaluating the financial position of the company on the basis of ratio analysis.

2.Comparing the firm’s financial position with last ten years’ data of central Bashundhara & Sonali group with the help of following ratios:

* + Liquidity ratios
  + Solvency/leveraging ratios
  + Coverage ratios
  + Activity/turnover ratios
  + Profitability ratios
  + Investor’s ratio

3.The project will focus on the study of overall working capital management at the organizations, for which the following study analysis will be undertaken.

**Tools for Financial Calculation**

* Microsoft Excel

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**Chapter – 02**

# Overview of Bashundhara Paper Mills Ltd. - Sonali Paper & Board mills Ltd.

**BASHUNDHARA PAPER MILLS LTD**

**COMPANY OVERVIEW**

The company was founded by Ahmed Akber Sobhan.The company was incorporated Bangladesh on September 28,1993 as a private limited company having its registered office in Dhaka. It was converted into a public limited company on January 30, 1994.

The Bashundhara Paper Mills Ltd. is a subsidiary of the Bashundhara Group, one of Bangladesh’s largest industrial conglomerates. The company specializes in the production of various paper and paper products, including writing and printing paper, packaging paper and tissue paper. Known for its commitment to quality, the company serves both domestic and international markets. To stay updated on the latest developments and details, it’s advisable to visit their official website or refer to recent news sources.

**MISSION**

“For the People, for the Country”

**VISION**

The Company’s aim is to serve people with maximum satisfaction and keep on working for the greater welfare of the people and the country. (Developed and maintained, 2016)

**CORE VALUES**

➢ Place customer interest and satisfaction as first priority.

➢ Value additions to the stakeholders through excellence in their operations.

➢ Maintain high ethical standard and transparency in dealings.

➢ Contribute significantly for the betterment of the society.

**SONALI PAPER & BOARD MILLS LIMITED (SPBML)**

***SONALI PAPER & BOARD MILLS LIMITED (SPBML)***

***SONALI PAPER & BOARD MILLS LIMITED (SPBML)***

**Ratio Analysis of Bashundhara Paper Mills Ltd.**

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# Ratio Analysis of Bashundhara Paper Mills Ltd.

##### **4.2 (a) CURRENT RATIO**

The current ratio is the difference between current assets and current liabilities. It measures your business’s ability to meet its short-term liabilities when they come due.Current refers to money you need and use in your short-term operations. This means that working capital excludes long-term investments in fixed assets, such as equipment and real estate.

* **Objective:** 
  + The ratio is mainly used to give an idea of the company’s ability to pay back its short-term liabilities with its short-term assets.
  + The higher the current ratio, the more capable the company is of paying its obligations. A ratio under 1 suggests that the company would be unable to pay its obligations if they came due at that point.

The ratio is calculated as follows:

Formula = 

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Current Asset** | **Current Liabilities** | **Current Ratio of**  **BPML** |
| **2014** | 9497282063 | 9357472343 | 1.01:1 |
| **2015** | 8691875615 | 8559313742 | 1.01:1 |
| **2016** | 9415203876 | 9411486165 | 1.00:1 |
| **2017** | 10447116551 | 10054493397 | 1.04:1 |
| **2018** | 11391302638 | 9809901738 | 1.16:1 |
| **2019** | 14456497247 | 12512520539 | 1.16:1 |
| **2020** | 10343431435 | 7103803866 | 1.46:1 |
| **2021** | 10234777984 | 6161470744 | 1.66:1 |
| **2022** | 10759811898 | 7314250726 | 1.47:1 |

* **INTERPRETATION:**

The Current ratio is one of the most commonly cited financial ratio. It measures the firm’s ability to meet its short-term liabilities. A current ratio of 2.00 is occasionally cited as acceptable. Here we see that, the current ratios are increase gradually from 2013-2021but slightly decrease in 2022. But all are below 2.00 which is really good for BPML. As BPML maintains the ratio it’s not a good and acceptable current ratio.

**4.2 (b) QUICK RATIO**

The quick ratio is also an indicator of a company’s short term [liquidity](https://www.investopedia.com/terms/l/liquidity.asp) [p](https://www.investopedia.com/terms/l/liquidity.asp)osition and measures a company’s ability to meet its short term obligations with its most liquid assets. But it is a more liquid version of current ratio. Because it excludes inventory which is more difficult to convert into cash. It is also called “Acid test”. The formula for quick ratio is

**Formula = Current Asset – Inventory / Total Current Liabilities**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Current Asset - Inventory:** | **Current Liabilities** | **Quick Ratio of BPML** |
| **2014** | 4431513223 | 9357472343 | 0.47:1 |
| **2015** | 3757187037 | 8559313742 | 0.44:1 |
| **2016** | 4028174044 | 9411486165 | 0.43:1 |
| **2017** | 4042626561 | 10054493397 | 0.40:1 |
| **2018** | 5075984271 | 9809901738 | 0.50:1 |
| **2019** | 6590097037 | 12512520539 | 0.53:1 |
| **2020** | 2878679028 | 7103803866 | 0.41:1 |
| **2021** | 2369518762 | 6161470744 | 0.38:1 |
| **2022** | 2489910933 | 7314250726 | 0.34:1 |
| **2023** | 2308110209 | 9473321438 | 0.24:1 |

* **Interpretation:**

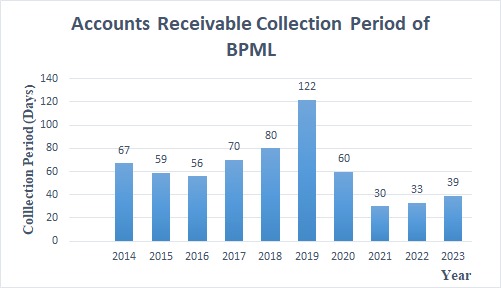
We know that, the ideal or standard quick ratio is 1:1. That is, for 1-taka current liability, there must be at least 1-taka liquid asset. But the above data shows that neither of the firms has the required level of liquid asset to satisfy short term obligations. Again, we also see that, BPML’s quick ratio is fluctuate over the time.

**4.3 (f) AVERAGE ACCOUNT RECEIVABLE COLLECTION PERIOD**

Average collection period refers to the amount of time it takes for a business to receive payments owed by its clients in terms of (AR). Companies use the average collection period to make sure they have enough cash on hand to meet their financial obligations. The average collection period is an indicator of the effectiveness of a firm’s AR management practices and is an important metric for companies that rely heavily on receivables.

**Formula =360/Accounts Receivable Turnover Ratio**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **360 DAYS:** | **Accounts Receivable turnover** | **Accounts Receivable turnover ratio of BPML:** |
| **2014** | 360 | 5.41 | 67 days |
| **2015** | 360 | 6.19 | 59 days |
| **2016** | 360 | 6.49 | 56 days |
| **2017** | 360 | 5.20 | 70 days |
| **2018** | 360 | 4.57 | 80 days |
| **2019** | 360 | 3.00 | 122 days |
| **2020** | 360 | 6.08 | 60 days |
| **2021** | 360 | 12.10 | 30 days |
| **2022** | 360 | 11.08 | 33 days |
| **2023** | 360 | 9.43 | 39 days |



* Interpretation:

Average Account Receivable Collection Period is the average time it takes a company to collect payments from its customers for goods or services sold on credit. It's a crucial metric in financial management as it indicates the efficiency of a company's credit and collection policies. A shorter collection period means faster cash flow, while a longer one can strain a company's finances.   Here 2021-2023 is the best account receivable collection period.

**4.2 (g) RETURN ON ASSETS**

Return on assets is a profitability ratio that provides how much profit a company can generate from its assets. In other words, return on assets (ROA) measures how efficient a company's management is in earning a profit from their economic resources or assets on their balance sheet.

##### **Formula = Net Income/Total Assets**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Year** | **Net Income:** | | **Total Assets:** | **ROA of BPML:** | |
| **2014** | | 218122717 | 17078550518 | | 1.28% | |
| **2015** | | 264672843 | 18083738820 | | 1.46% | |
| **2016** | | 488303132 | 18908848938 | | 2.58% | |
| **2017**  **2018**  **2019**  **2020**  **2021**  **2022** | | 385131071  427448536  291848486  285836735  411190105  507848139 | 20677887934  21926671650  30186245753  27544362833  28738810420  34854110736 | | 1.86%  1.95%  0.97%  1.04%  1.43%  1.46% | |
| **2023** | | 455010739 | 34854110736 | | 1.31% | |

2013

2016

2017

2018

2019

2020

2021202

015

###### Interpretation:

The return on asset is primarily an indicator of managerial efficiency. A rising return on asset signifies that the company is gaining profit with each taka invested. Here you can see that ROA 0f 2014 is lower than 2022 which is a good sign.

**4.2 (h) DEBT RATIO**

D

The term debt ratio refers to a financial ratio that measures the extent of a company’s leverage. The debt ratio is defined as the ratio of total debt to total assets expressed as a decimal or percentage. It can be interpreted as the proportion of a company’s assets that are financed by debt.

**Formula = Net Debt/Total Assets.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Total Debt:** | **Total Assets:** | **Debt ratio of BPML:** |
| **2014** | 14324950649 | 17078550518 | 84% |
| **2015** | 13870335321 | 18083738820 | 77% |
| **2016** | 14405415623 | 18908848938 | 76% |
| **2017** | 15789323549 | 20677887934 | 76% |
| **2018** | 16931245134 | 21926671650 | 77% |
| **2019** | 22705993454 | 30186245753 | 75% |
| **2020** | 19817336297 | 27544362833 | 72% |
| **2021** | 20373852708 | 28738810420 | 71% |
| **2022** | 21783669463 | 34854110736 | 62% |
| **2023** | 24200713820 | 37829960907 | 64% |

* **Interpretation:**

A debt ratio of greater than 1.0 or 100% means a company has more debt than assets while a debt ratio of less than 100% indicates that a company has more assets than debt.

**4.2 (i)FIXED ASSETS TURNOVER**

The fixed asset turnover ratio reveals how efficient a company is at generating sales from its existing fixed assets. The fixed asset turnover ratio is calculated by dividing net sales by the average balance in fixed assets. A higher ratio implies that management is using its fixed assets more effectively.

**Formula = Sales/Net fixed Assets.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Sale:** | **Net fixed Assets:** | **Fixed Assets turnover ratio of BPML:** |
| **2014** | 10335094709 | 6981908382 | 1.48 times |
| **2015** | 10435756308 | 8787080166 | 1.99 times |
| **2016** | 10334635050 | 8726373518 | 1.24 times |
| **2017** | 10004078641 | 8531687597 | 1.18 times |
| **2018** | 12508072108 | 8681566875 | 1.44 times |
| **2019** | 11039126581 | 13455987158 | 0.82 times |
| **2020** | 8544463487 | 15607739678 | 0.54 times |
| **2021** | 9282857069 | 17374110184 | 0.53 times |
| **2022** | 11237967247 | 23197140063 | 0.48 times |
| **2023** | 13188221005 | 23613110937 | 0.56 times |

* **Interpretation:**

A higher ratio implies that management is using its fixed assets more effectively. A high FAT ratio does not tell anything about a company's ability to generate solid profits or cash flows.

**4.3 MODERN RATIO ANALYSIS**

In order to overcome the difficulties which, appear under traditional approach, the modern approach to the analysis of the financial statements are being introduced. The modern approach to financial statement analysis is quite logical, more-reasonable, most practical from the standpoint of various financial analysis relating to liquidity, solvency, profitability and management efficiency of a firm.

There are several improved measures of liquidity. Two of those are:

1. The cash conversion cycle
2. Net Liquid Balance

4.3 (a) CASH CONVERSION CYCLE:

Cash Conversion Cycle is the net time interval between the expenditure of in the paying the liabilities and the receipt of cash from the collection of receivables. The low of the cash conversion cycle, the more liquid the firm is said to be. It is calculated by:

**Formula= Operating cycle – Payment deferral Period**.

Here,

* **Operation Cycle: Average collection period + Inventory Collection Period**
  + Payment Deferral Period:

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Operating Cycle:** | **Total Payment Deferral period:** | **CCC of BPML:** |
| **2014** | 283 | 18 | 265 |
| **2015** | 245 | 26 | 219 |
| **2016** | 232 | 28 | 204 |
| **2017** | 238 | 35 | 203 |
| **2018** | 244 | 50 | 194 |
| **2019** | 251 | 35 | 216 |
| **2020** | 297 | 92 | 205 |
| **2021** | 275 | 85 | 190 |
| **2022** | 225 | 56 | 169 |
| **2023** | 207 | 48 | 159 |

* Interpretation:

Here we can see that, BPML’s cash conversion cycle in quite high with the exception of the year 2023. On Average BPML cash conversion cycle is about 6 months. So, it takes half a year for the company to receive cash from customers after it has invested into purchasing the inventory.

4.3 (b) NET LIQUIDE BALANCE:

Net Liquid Balance: This index measure center on the firm’s balance of cash and marketable securities. The argument is that this balance represents the firm’s true reserve against unanticipated cash needs, since other remedies for cash shortages can be very costly.

* **Formula: NLB: (Cash + Mar. Sec. – Notes Payable)/ Total Assets**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Cash:** | **Total Assets:** | **NLB of BPML:** |
| **2014** | 263968861 | 17078550518 | 0.02 |
| **2015** | 152751064 | 18083738820 | 0.01 |
| **2016** | 202217966 | 18908848938 | 0.01 |
| **2017** | 147112149 | 20677887934 | 0.01 |
| **2018** | 187608053 | 21926671650 | 0.01 |
| **2019** | 1336654791 | 30186245753 | 0.04 |
| **2020** | 280990242 | 27544362833 | 0.01 |
| **2021** | 416398153 | 28738810420 | 0.02 |
| **2022** | 412936636 | 34854110736 | 0.01 |
| **2023** | 353328748 | 37829960907 | .009 |

* Interpretation:

The data shows that like current ratio, BPML’s Net Liquide Balance is also very low.

**Ratio Analysis of Sonali Paper & Board Mills**

# Ratio Analysis of Sonali Paper & Board Mills

##### **4.2 (a) CURRENT RATIO**

* Formula = 

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Current Asset** | **Current Liabilities** | **Current Ratio of**  **SPBML** |
| **2014** | 167972690 | 551887529 | 0.30:1 |
| **2015** | 130859987 | 395550673 | 0.33:1 |
| **2016** | 335162299 | 614891835 | 0.55:1 |
| **2017** | 243439942 | 529852723 | 0.50:1 |
| **2018** | 413239266 | 738088978 | 0.56:1 |
| **2019** | 596860331 | 923055269 | 0.65:1 |
| **2020** | 512521723 | 866582849 | 0.59:1 |
| **2021** | 911453213 | 849445458 | 1.07:1 |
| **2022** | 911453213 | 1191274525 | 0.77:1 |
| **2023** | 1055516002 | 1099522084 | 0.96:1 |

* **INTERPRETATION:**

The Current ratio is one of the most commonly cited financial ratio. It measures the firm’s ability to meet its short-term liabilities. A current ratio of 2.00 is occasionally cited as acceptable. Here we see that, the current ratios are increase gradually from 2014-2021 but slightly decrease in 2022. But all are below 2.00 which is really good not for SPBML. As SPBML maintains the ratio it’s not a good and acceptable current ratio.

**4.2 (b) QUICK RATIO**

* **Formula = Current Asset – Inventory / Total Current Liabilities**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Current Asset - Inventory:** | **Current Liabilities** | **Quick Ratio of SPBML** |
| **2014** | 97544720 | 551887529 | 0.18:1 |
| **2015** | 57528272 | 395550673 | 0.15:1 |
| **2016** | 88678387 | 614891835 | 0.14:1 |
| **2017** | 64682551 | 529852723 | 0.12:1 |
| **2018** | 200686142 | 738088978 | 0.27:1 |
| **2019** | 277077352 | 923055269 | 0.30:1 |
| **2020** | 248598650 | 866582849 | 0.29:1 |
| **2021** | 729174337 | 849445458 | 0.86:1 |
| **2022** | 584845480 | 1191274525 | 0.49:1 |
| **2023** | 707002127 | 1099522084 | 0.64:1 |

* **Interpretation:**

We know that, the ideal or standard quick ratio is 1:1. That is, for 1-taka current liability, there must be at least 1-taka liquid ass et. But the above data shows that neither of the firms has the required level of liquid asset to satisfy short term obligations. Again, we also see that, SPBMLs quick ratio is fluctuate over the time.

4.2 (c) INVENTORY TURNOVER RATIO

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | Cost of Goods Sold | Inventory | **Inventory turnover of**  **SPBML** |
| **2014** | 750611866 | 70427970 | 10.66 times |
| **2015** | 747280905 | 73331715 | 10.19 times |
| **2016** | 1181789780 | 246483912 | 4.79 times |
| **2017** | 1123619788 | 178757391 | 6.29 times |
| **2018** | 1241527572 | 212553124 | 5.84 times |
| **2019** | 1532434322 | 319782979 | 4.79 times |
| **2020** | 1228606943 | 263923073 | 4.66 times |
| **2021** | 1230027348 | 182278876 | 6.75 times |
| **2022** | 1831959266 | 326607733 | 5.61 times |
| **2023** | 2276818536 | 348513875 | 6.53 times |

## Formula =

* **Interpretation:**

The inventory turnover ratio of SPBML. As a manufacturing company it’s a good sign to remain high of inventory process from 2014-2017.But its up and down from 2020-2021. The average processing period may vary from industry to industry.

4.2(d) Average Inventory Collection period

###### Formula =360/Inventory turnover Ratio

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **365 DAYS:** | **Inventory turnover Ratio:** | **Average Inventory Collection of SPBML:** |
| **2014** | 360 | 10.66 | 34 days |
| **2015** | 360 | 10.19 | 35 days |
| **2016** | 360 | 4.79 | 75 days |
| **2017** | 360 | 6.29 | 57 days |
| **2018** | 360 | 5.84 | 62 days |
| **2019** | 360 | 4.79 | 75 days |
| **2020** | 360 | 4.66 | 77 days |
| **2021** | 360 | 6.75 | 53 days |
| **2022** | 360 | 5.61 | 64 days |
| **2023** | 360 | 6.53 | 55 days |

* **Interpretation:**

Minimum collection period is always preferable because minimum collection period make faster transection system in a company.Here (2014-2015) the result was satisfactory , but within a year collection period increase drastically .

**4.2 (e) ACCOUNT RECEIVABLE TURNOVER**

Net Sales

* **Formula=**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Net Sales:** | **Accounts Receivable:** | **Accounts Receivable turnover ratio of SPBML:** |
| **2014** | 958347991 | 32733191 | 29.28 |
| **2015** | 955170713 | 23649920 | 40.39 |
| **2016** | 1417564851 | 15151929 | 93.56 |
| **2017** | 1347786898 | 10193730 | 132 |
| **2018** | 1488570023 | 80202987 | 19 |
| **2019** | 1836468625 | 166184770 | 11 |
| **2020** | 1408650300 | 191240291 | 7 |
| **2021** | 1414657548 | 154778171 | 9 |
| **2022** | 2046087300 | 175261452 | 12 |
| **2023** | 2490642634 | 65255644 | 38 |

 Interpretation:

The above data shows that, in the first 4-year account receivable turnover ratio was increasing above the competition. Which is good because we know that the higher the turnover the quickly the receivables are collected. But in 2018-2019 there is a serious downfall compared to their past performance and competition. But last 3 account receivable turnover decrease which is not good for the company.

**4.3 (f) AVERAGE ACCOUNT RECEIVABLE COLLECTION PERIOD**

**Formula =360/Accounts Receivable Turnover Ratio**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **365 DAYS:** | **Accounts Receivable turnover** | **Accounts Receivable turnover ratio of SPBML:** |
| **2014** | 360 | 29.28 | 12 days |
| **2015** | 360 | 40.39 | 9 days |
| **2016** | 360 | 93.56 | 4 days |
| **2017** | 360 | 132 | 3 days |
| **2018** | 360 | 19 | 19 days |
| **2019** | 360 | 11 | 33 days |
| **2020** | 360 | 7 | 51 days |
| **2021** | 360 | 9 | 40 days |
| **2022** | 360 | 12 | 30 days |
| **2023** | 360 | 38 | 9 days |

* **Interpretation:**

Average Account Receivable Collection Period is the average time it takes a company to collect payments from its customers for goods or services sold on credit. It's a crucial metric in financial management as it indicates the efficiency of a company's credit and collection policies. A shorter collection period means faster cash flow, while a longer one can strain a company's finances.   Here 2021-2023 is the best account receivable collection period.

**4.2 (h) DEBT RATIO**

D

**Formula = Net Debt/Total Assets.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Total Debt:** | **Total Assets:** | **Debt ratio of SPBML:** |
| **2014** | 14324950649 | 7800267272 | 1.84 % |
| **2015** | 13870335321 | 7778894129 | 1.78% |
| **2016** | 14405415623 | 6133628627 | 2.35% |
| **2017** | 15789323549 | 6030600324 | 2.62% |
| **2018** | 16931245134 | 6200206125 | 2.73% |
| **2019** | 22705993454 | 6388335310 | 3.55% |
| **2020** | 19817336297 | 6388335310 | 3.10% |
| **2021** | 20373852708 | 6675663652 | 3.05% |
| **2022** | 21783669463 | 7004015939 | 3.11% |
| **2023** | 24200713820 | 6947160767 | 3.48% |

* **Interpretation:**

A debt ratio of greater than 1.0 or 100% means a company has more debt than assets while a debt ratio of less than 100% indicates that a company has more assets than debt.

**Modern Ratio Analysis**

In order to overcome the difficulties which, appear under traditional approach, the modern approach to the analysis of the financial statements are being introduced. The modern approach to financial statement analysis is quite logical, more-reasonable, most practical from the standpoint of various financial analysis relating to liquidity, solvency, profitability and management efficiency of a firm.

There are several improved measures of liquidity. Two of those are:

1. The cash conversion cycle
2. Net Liquid Balance

**4.3(a)Cash Conversion Cycle**

D

Formula= Operating cycle – Payment deferral Period Here,

* Operation Cycle: Average collection period + Inventory Collection Period
  + Payment Deferral Period:
* 

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Operating Cycle:** | **Total Payment Deferral period:** | | **CCC of SPBML:** |
| **2014** | 46 | 16 | | 64 |
| **2015** | 44 | 16 | 60 | |
| **2016** | 79 | 17 | 96 | |
| **2017** | 60 | 23 | 83 | |
| **2018** | 81 | 16 | 97 | |
| **2019** | 108 | 9 | 115 | |
| **2020** | 128 | 16 | 144 | |
| **2021** | 93 | 17 | 110 | |
| **2022** | 94 | 10 | 104 | |
| **2023** | 64 | 8 | 72 | |

* **Interpretation:**

Here we can see that, SPBML’s cash conversion cycle in quite high with the exception of the year 2020. On Average SPBML cash conversion cycle is about 6 months. So, it takes half a year for the company to receive cash from customers after it has invested into purchasing the inventory.

**Comparison**

# Comparison

## Analyzing Current Ratios for Bashundhara and Sonali Paper Mills Ltd.:

* **Current Ratio:**

A financial ratio that measures a company's ability to pay its short-term obligations. A higher current ratio generally indicates better liquidity.

* **Bashundhara Mills:**
* The current ratio ranges from 1.00:1 to 1.66:1.
* Most of the values are above 1.00:1, suggesting that the company is generally in a good position to meet its short-term liabilities.
* **Sonali Paper Mills:**
* The current ratio ranges from 0.30:1 to 1.07:1.
* Several values are below 1.00:1, indicating that the company might have difficulty meeting its short-term obligations.
* **Conclusion:**

Based on the current ratio analysis, **Bashundhara Mills** appears to be in a stronger financial position than Sonali Paper Mills. The higher current ratios of Bashundhara Mills suggest that it has a better ability to pay off its short-term debts. However, it's important to consider other factors beyond just the current ratio, such as the industry standard, company-specific circumstances, and overall financial health.

## Analyzing Quick Ratios for Bashundhara and Sonali Paper Mills Ltd.:

* **Quick Ratio:**

A financial ratio that measures a company's ability to meet its short-term obligations using its most liquid assets (excluding inventory).

* **Bashundhara Group:**
* The quick ratio ranges from 0.24:1 to 0.53:1.
* Most of the values are below 1.00:1, suggesting that the company might have some challenges meeting its short-term obligations without selling inventory.
* **Sonali Group:**
* The quick ratio ranges from 0.12:1 to 0.86:1.
* Several values are below 1.00:1, indicating that the company might face difficulties meeting its short-term liabilities without selling inventory.

**Conclusion:**

Based on the quick ratio analysis, **Bashundhara Group** appears to be in a slightly stronger financial position than Sonali Group. While both companies have challenges meeting their short-term obligations without selling inventory, Bashundhara Group's quick ratios are generally higher, suggesting a slightly better ability to meet these obligations.

## Analyzing Inventory Turnover Ratios for Bashundhara and Sonali Paper Mills Ltd.:

* **Inventory Turnover Ratio:**

A financial ratio that measures how efficiently a company is managing its inventory. A higher ratio generally indicates that the company is selling its inventory quickly, which can improve cash flow and reduce the risk of inventory obsolescence.

* **Bashundhara Paper Mills:**
* The inventory turnover ratio ranges from 1.22 times to 2.14 times.
* While these values are not particularly high, they suggest that the company is moderately efficient in managing its inventory.
* **Sonali Paper Mills:**
* The inventory turnover ratio ranges from 4.66 times to 10.66 times.
* These significantly higher values indicate that Sonali Paper Mills is much more efficient in selling its inventory compared to Bashundhara Paper Mills.
* **Conclusion:**

Based on the inventory turnover ratio analysis, **Sonali Paper Mills** appears to be significantly better in managing its inventory. The much higher turnover ratios of Sonali Paper Mills suggest that it is able to sell its inventory more quickly, which can lead to improved cash flow, reduced inventory costs, and a lower risk of obsolete inventory.

## Analyzing average inventory collection period for Bashundhara and Sonali Paper Mills Ltd.:

* To determine which paper mill has a better average inventory collection period, we need to calculate the average for each mill.

**Average Inventory Collection Period for Bashundhara Paper Mills:**

(178 + 173 + 182 + 174 + 171 + 175 + 215 + 195 + 177 + 299) / 10 = 189.1 days

**Average Inventory Collection Period for Sonali Paper Mills:**

(34 + 35 + 75 + 57 + 62 + 75 + 77 + 53 + 64 + 55) / 10 = 58.3 days

* **Conclusion:**

**Sonali Paper Mills** has a significantly better average inventory collection period compared to Bashundhara Paper Mills. This means that Sonali Paper Mills collects its receivables (money owed to them by customers) much faster than Bashundhara Paper Mills.

## Analyzing Account Receivables for Bashundhara and Sonali Paper Mills Ltd.:

* **Understanding the Data:**

Both Bashundhara and Sonali Paper Mills have provided a list of account receivables, which represent the amounts owed to them by customers for goods or services.

* **Key Considerations for Analysis:**

To determine which mill has a better account receivable situation, we need to consider several factors:

1. **Total Amount Receivable:** The overall amount owed to each mill.
2. **Average Receivable:** The average amount owed per customer.
3. **Distribution of Receivables:** Whether the amounts are concentrated in a few large accounts or spread across many smaller ones.
4. **Age of Receivables:** How long these amounts have been outstanding.

* **Data Analysis:**
* **Bashundhara Paper Mills:**
* **Total Receivable:** 78.48
* **Average Receivable:** 7.85 (assuming 10 customers)
* **Distribution:** Seems relatively spread out.
* **Age of Receivables:** Unknown without additional information.
* **Sonali Paper Mills:**
* **Total Receivable:** 312.28
* **Average Receivable:** 31.23 (assuming 10 customers)
* **Distribution:** Concentrated in a few larger accounts (e.g., 93.56, 132).
* **Age of Receivables:** Unknown without additional information.

**Initial Analysis:** Based on the initial analysis, **Sonali Paper Mills** has a significantly higher total amount receivable and a much higher average receivable per customer. This suggests that Sonali has either more customers or larger-sized customers, or both.

**Conclusion:** While Sonali Paper Mills has a higher total receivable and average receivable, the concentration of receivables in a few large accounts warrants further investigation. A more comprehensive analysis considering factors like age of receivables, creditworthiness, and collection efforts is necessary to determine which mill has a better account receivable situation.

## Analyzing Account Receivables collection period for Bashundhara and Sonali Paper Mills Ltd.:

* Sonali Papers has a better average account receivable collection period. This means that Sonali Papers collects its accounts receivable faster than Bashundhara Papers.

|  |  |
| --- | --- |
| **Company** | **Average Account Receivable Collection Period (days)** |
| Bashundhara Papers | 63.9 |
| Sonali Papers | 17.2 |

## Analyzing Average Return on asset for Bashundhara and Sonali Paper Mills Ltd.:

* Bashundhara Papers has a better average Return on Assets (ROA) compared to Sonali Papers. This is based on the data you provided.
* Here's a table summarizing the ROA for both companies:

|  |  |
| --- | --- |
| **Company** | **Average ROA** |
| Bashundhara Papers | 1.42% |
| Sonali Papers | 0.87% |

## Analyzing Debt Ratio for Bashundhara and Sonali Paper Mills Ltd.:

Here's an analysis of the debt ratios for Bashundhara Papers Mills and Sonali Papers Mills, along with a comparison to determine which company is in a better financial position:

**Bashundhara Papers Mills:**

* Debt ratio ranges from 62% to 84%.
* Generally considered to be highly leveraged, indicating a significant reliance on debt financing.
* Higher leverage can increase financial risk during economic downturns or if the company faces difficulties in meeting its debt obligations.

**Sonali Papers Mills:**

* Debt ratio ranges from 1.78% to 3.55%.
* Significantly lower leverage compared to Bashundhara Papers Mills.
* Suggests a much stronger financial position with less reliance on debt financing.
* Lower leverage typically translates to lower financial risk.

**Comparison and Conclusion:**

From the analysis, it's clear that **Sonali Papers Mills** is in a significantly better financial position than Bashundhara Papers Mills. Its significantly lower debt ratio indicates a much lower reliance on debt financing, which translates to lower financial risk.

## Analyzing Fixed Asset Turnover for Bashundhara and Sonali Papers Mills Ltd.:

**Understanding Fixed Asset Turnover**

Fixed Asset Turnover is a financial ratio that measures how efficiently a company is using its fixed assets to generate revenue. A higher ratio indicates that a company is generating more revenue per dollar invested in fixed assets.

**Comparing Bashundhara and Sonali Papers Mills**

Based on the provided data, it's clear that **Bashundhara Papers Mills** has a significantly higher fixed asset turnover compared to Sonali Papers Mills.

* **Bashundhara:** The lowest turnover is 0.48, and the highest is 1.99.
* **Sonali:** The lowest turnover is 0.12, and the highest is 0.42.

**Implications of Higher Turnover**

A higher fixed asset turnover generally suggests:

* **Efficient Asset Utilization:** The company is making the most of its fixed assets to generate revenue.
* **Strong Sales Performance:** The company is effectively selling its products or services.
* **Lower Fixed Costs:** The company may have lower fixed asset costs relative to its revenue.

**Conclusion**

From the given data, **Bashundhara Papers Mills** appears to be more efficient in utilizing its fixed assets to generate revenue compared to Sonali Papers Mills. This could be due to factors such as better production planning, more efficient equipment, or stronger sales strategies.

## Analyzing Modern Ratio Analysis for Bashundhara and Sonali Paper Mills Ltd.:

The provided data seems to be incomplete. To conduct a comprehensive modern ratio analysis, we would need more information about the financial performance of Bashundhara and Sonali papers mills, such as:

* **Balance sheet:** This would provide details about the assets, liabilities, and equity of each company.
* **Income statement:** This would show the revenue, expenses, and net income of each company.
* **Cash flow statement:** This would reveal the inflows and outflows of cash for each company.

Once we have this data, we can calculate various financial ratios to assess the profitability, liquidity, solvency, efficiency, and growth of both companies. Some of the key ratios to consider include:

* **Profitability ratios:** Gross profit margin, net profit margin, return on assets (ROA), return on equity (ROE)
* **Liquidity ratios:** Current ratio, quick ratio, cash ratio
* **Solvency ratios:** Debt-to-equity ratio, interest coverage ratio
* **Efficiency ratios:** Inventory turnover ratio, accounts receivable turnover ratio, asset turnover ratio
* **Growth ratios:** Earnings per share (EPS), dividend payout ratio, price-to-earnings (P/E) ratio

## Analyzing Net Liquid Balance: Bashundhara vs. Sonali Papers Mills Ltd.:

**Understanding Net Liquid Balance** Net liquid balance is a financial metric that indicates a company's ability to meet short-term obligations. It's calculated by subtracting current liabilities from current assets. A higher net liquid balance generally suggests better financial health.

**Data Analysis** Based on the provided data for Bashundhara and Sonali Papers Mills, we can calculate the average net liquid balance for each:

* **Bashundhara:** (0.02 + 0.01 + 0.01 + 0.01 + 0.01 + 0.04 + 0.01 + 0.02 + 0.01 + 0.009) / 10 = **0.0153**
* **Sonali:** (0.006 + 0.002 + 0.009 + 0.006 + 0.007 + 0.006 + 0.006 + 0.013 + 0.045 + 0.014) / 10 = **0.0129**

**Conclusion : Bashundhara Papers Mills** has a slightly higher average net liquid balance (0.0153) compared to Sonali Papers Mills (0.0129). This suggests that Bashundhara is in a stronger position to meet its short-term financial obligations. However, it's important to note that this is a simplified analysis based on a limited dataset. A more comprehensive evaluation would consider additional factors such as industry benchmarks, overall financial performance, and specific business conditions.

**Conclusion**

# Conclusion

Working capital is crucial to the operations of every business and needs to be managed effectively. The management of cash, inventory, accounts receivable, and accounts payable is referred to as working capital management. A corporation must pay close attention to its working capital and keep its balance at the right level. A lack of working capital can result in decreased sales and output, as well as a lack of liquidity; on the other hand, an excess of working capital could be interpreted as lost possibilities for investment.

However, to achieve the objective of having efficient working capital is to accomplish short term assets and liabilities such as implement policies on inventory, credit and collection and supplier’s payment term. However, the study has found that there are also other factors affect the management of working capital.

According to regression analysis data from this study, Bashundhara Paper Mills Limited and Sonali Paper Mills Limited's working capital management is impacted by the length of their accounts receivable term. Account receivable periods and performance metrics were shown to be significantly correlated negatively in this study. The inverse connection shows that the company's performance will rise as the account receivable period decreases. Also, the study discovered that the length of the accounts receivable term is longer than the duration of payments, resulting in a longer cash conversion.

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