

**Project on**

**The Working Capital Management of Bata bd Limited**

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**Letter of transmittal**

5 October, 2024

Md. Erfan

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**Subject: Submission of report on “Working capital management Bata bd Limited”.**

Dear Sir,

Here is the report that we assigned on the topic as per your instruction. The report has been completed by the knowledge that we have gathered from the course “Working capital management”. We have tried to answer all the questions that you have about the report. We would be happy if you read the report carefully.

We have tried our label best to complete this report meaningfully and correctly, as much as possible. The prime focus of the report is to give a clear concept of acquire knowledge from “Working capital management”. However, we will always be ready to provide any further clarification that you may require.

We would thankful once again if you please give your advice on our effort.

Yours obediently,

Sourav saha

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**Acknowledgement**

First of all, we would like to express our gratitude to almighty Allah to enabling us to complete this report on **“Working capital management Bata bd Limited”.**

Successfully completion of any type of report requires help from a number of persons. We have also taken help from different people for the preparation of the report. Now there is a little effort to show our deep gratitude to that helpful person.

We convey our sincere gratitude to our course instructor. Md. Erfan, Assistant Professor & Chairman, Department of Computer Science & Engineering, University of Barishal. Without her kind direction and proper guidance this study would have been a little success. In every phase of the report, her supervision and guidance shaped this report to be completed perfectly.

**Bona fide Certificate**

This is certified that this report titled **“Working capital management of Bata bd Limited”** is the bona-fide work of **Sourav saha** who carried out the report under my supervision. Certified further, that to the best of my knowledge the work show herein does not part of any other report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

………………………..

Signature

Md. Erfan

Assistant Professor & Chairman

Department of Computer Science & Engineering

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**Executive Summary**

This study tries to explore the impact of working capital management on profitability of Bata bd Limited” Working Capital can be defined as the amount when current asset is surpassing current liabilities. The focus of this report is to analyze how the company manages its working capital on the basis of cash, inventory period, receivable period and payable period management and how it influences the profitability of an organization.

This report starts with the objective of the study and the methodology. The report contains the analysis of ten years’ data of Bata and commencing from the year 2014 to 2023. Most of the researchers found that degree of efficiency of administration of working capital largely determines the success or failures of overall operations of an organization. The objective of this report is to analyze the previous studies and relate them with this report.

Afterwards description of the company including its history, products, mission, vision, organization structure etc. is discussed in chapter two. WCM policy for Bata limited is discussed elaborately in this chapter as well. They follow aggressive WCM policy because of their higher utilization of short-term financing. Inventory management performance is evaluated using inventory conversion period.

Finally, findings and conclusion chapter includes a summary of the results found in the analysis portion.

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# Chapter-1

## Introduction

## 1.1. Introduction:

Working capital management is concerned with the problems arise in attempting to manage the current assets, the current liabilities and the relationship that exist between them. The term current assets refers to those assets which in ordinary course of business can be, or, will be, turned in to cash within one year without undergoing a diminution in value and without disrupting the operation of the firm. The major current assets are cash, marketable securities, account receivable and inventory, Current liabilities ware those liabilities which is to be paid in ordinary course of business, within a year, out of the current assets or earnings of the concern. The basic current liabilities are account payable, bill payable, bank over-draft, and outstanding expenses.

The goal of working capital management is to maximize operational efficiency and thus it helps maintain smooth operation and also help to improve the company’s earning and profitability. The objective of financial decision making is to maximize the to shareholders wealth. To achieve this, it is necessary to generate sufficient profits can be earned will naturally depend upon the magnitude of the sales among other things but sales cannot convert into cash. There is a need for working capital in the form of current assets to deal with the problem arising out of lack of immediate realization of cash against goods sold.

## 1.2 Scope of the study:

The field of our study is the Working capital management of Apex tannery limited. For conducting this study an overall knowledge of the working capital management is necessary. The scope of the main part covers the financial analysis of Apex and Bata limited. This refers that how the company is performing over the years (2014-2023).

## 1.3 Objective of Study:

Study of the working capital management is important because unless the working capital is managed effectively, monitored efficiently planed properly and reviewed periodically at regular intervals it cannot earn profits and increase its turnover. With this primary objective of the study, the following objectives are framed for a depth analysis of Apex and Bata limited:

1. To ensure that the organization always has enough cash to meet its legal obligations and keep liquidity- that means to maintain adequate short term financing flexibility.

2. To arrange whatever fund are required from external sources at the right time, in the right form.

3. To study the liquidity position through various working capital related ratios.

4. To study the working capital components such as receivables accounts, cash management, Inventory position.

5. To forecast and plan for the financial requirements of future operations.

6. To make all decisions and recommendations on the basis of one primary criterion; maximizing the long term value of the organization. This objective is attained through maximizing the wealth of the organization by maximizing stock price.

## 1.4 Limitations of the study:

We tried our level best to make the report realistic and properly accepted. However, many problems appeared in the way of conducting the study. Some of the information is not disclose by the company. However, we try our best to settle and pass up the report before the due date and hoping it will satisfy.

The study considers following limitations:

1. Lack of in-depth knowledge and analytical ability for writing such report.

2. Another limitation of this study is company’s policy of not disclosing some data and information, which could be very much useful.

3. In case of the secondary data collection, there were few secondary information available.

4. Lack of experience to analyze data.

5. Time factor is the most important one. The study was conducted within a short period of time.

6. Manufacturing sector is a very vast sector where we have a little knowledge about it which limits our report.

7. The study is based on only secondary data

## 1.5 Research methodology:

**Sources of Data**:

The information we needed to complete this report were collected from the following sources:

**Primary sources of data:**

Though it is an analyzing report but it is matter of great regret that we hardly use primary data for this report. The main reason for this problem is we are far from the Apex and Bata limited and that’s why we can’t collect data from it directly and for this reason we depend on the secondary data.

**Secondary sources of data:**

Secondary data are collected through gathering of the published materials such as annual report of the company, it means sources of existing/published data.

i. Annual report of Bata limited.

ii. Website of Bata limited.

iii. Various report and articles related to the study.

iv. Various online publications.

v. Different textbook

# Chapter: 2

## Company Overview

# 2.1. History of Bata Limited

**Bata Limited** is a renowned multinational footwear and fashion accessory manufacturer and retailer. Established in 1894 in what was then the Austro-Hungarian Empire (now the Czech Republic), Bata has grown into one of the largest and most successful shoe companies in the world. Here’s an overview of its rich history:

1. **Founding and Early Years (1894-1914)**

**Tomas Bata**, along with his siblings Antonin and Anna, founded the company in 1894 in the town of Zlín, Moravia (now in the Czech Republic).The Bata family had a long tradition in shoemaking, but Tomas wanted to industrialize the process. They started with a small shop producing handmade shoes. Early on, Tomas implemented modern production techniques, such as the division of labor and mechanization, which allowed for lower prices and mass production. The company grew rapidly by offering affordable, durable shoes to a wide market.

2. **Innovation and Expansion (1914-1932)**

World War I boosted demand for durable footwear, and Bata expanded significantly during this time. After the war, Tomas Bata implemented social and industrial reforms in Zlín, where Bata was headquartered. He built a company town with housing, schools, and medical facilities for employees. Bata introduced the first fixed-price system and employed marketing techniques like brand identity and customer loyalty programs. By 1929, Bata had established factories in other countries, including Poland, Yugoslavia, and India, positioning itself as a global company.

**3. Bata’s Death and Further Growth (1932-1939)**

In 1932, Tomas Bata tragically died in a plane crash. His half-brother, Jan Antonin Bata, took over the company and continued its expansion. Under Jan Antonin, Bata diversified its products beyond footwear, venturing into tires, textiles, and chemicals. By the late 1930s, Bata had factories and retail outlets in over 30 countries and became one of the world’s largest shoe manufacturers.

## 2.2 Mission

The mission of Bata Limited focuses on delivering high-quality footwear while emphasizing customer satisfaction, innovation, and corporate responsibility. The company aims to provide affordable and durable shoes to consumers worldwide, catering to diverse needs and preferences. Key elements of Bata’s mission include:

* Customer-Centric Approach
* **Innovation**
* **Sustainability**
* Global Reach, Local Touch
* **Quality and Affordability**

## 2.3. Vision

The vision of Bata Limited is centered on being a leading global footwear brand known for innovation, quality, and sustainability, while continuously improving the lives of its customers and communities. Key aspects of Bata’s vision include:

* Global Leadership
* Sustainability Leadership
* **Customer Satisfaction**:
* Innovation and Modernization
* Community Engagement

# CHAPTER- 3

## CONCEPT OF WORKING CAPITAL MANAGEMENT

## 3.1 Theory of Working Capital

Working capital management is a business strategy designed to ensure that a company operates efficiently by monitoring and using its current assets and liabilities to their most effective use. Working capital management is a crucial aspect of financial management for businesses. It involves managing a company's short-term assets and liabilities to ensure it has enough liquidity to meet its operational needs and to support its day-to-day business activities. Effective working capital management is essential for maintaining the financial health and stability of a company.

The components of Working Capital Management are as follows:

• Cash Management

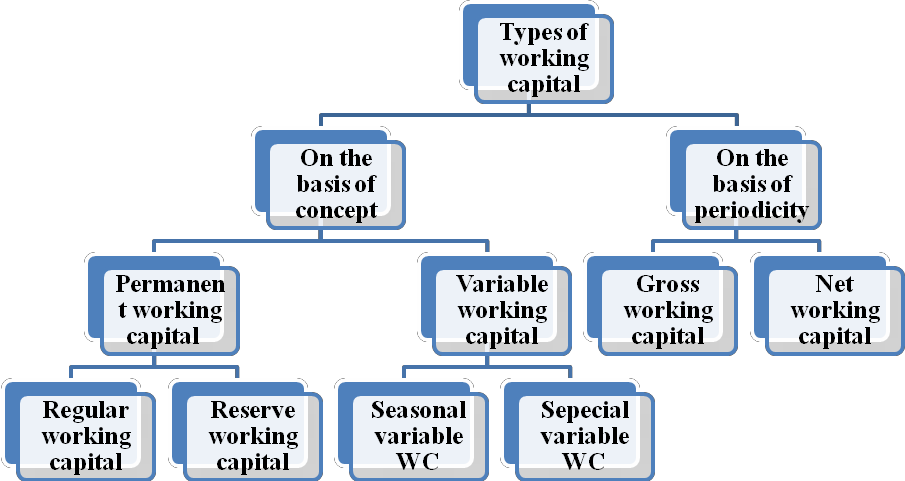
• Inventory Management

• Receivables Management

• Payables Management

## 3.2 Types of Working Capital

According to the needs of business, the working capital may be classified as follows:



### 3.2.1. On the basis of periodicity

The requirements of working capital are continuous. More working capital is required in a particular season or the peck period of business activity. On the basis of periodicity working capital can be divided under two categories as under:

* Permanent working capital
* Variable working capital
* Permanent Working Capital

This type of working capital is known as **Fixed Working Capital.** Permanent working capital means the part of working capital which is permanently locked up in the current assets to carry out the business smoothly. The minimum amount of current assets which is required to conduct the business smoothly during the year is called permanent working capital. For example, investments required to maintain the minimum stock of raw materials or to cash balance. The amount of permanent working capital depends upon the size and growth of company. Fixed working capital can further be divided into two categories as under:

**i. Regular Working capital:**

Minimum amount of working capital required to keep the primary circulation. Some amount of cash is necessary for the payment of wages, salaries etc.

**ii. Reserve Margin Working capital:**

Additional working capital may also be required for contingencies that may arise any time. The reserve working capital is the excess of capital over the needs of the regular working capital is kept aside as reserve for contingencies, such as strike, business depression etc.

* **Variable or Temporary Working Capital:**

The term variable working capital refers that the level of working capital is temporary and fluctuating. Variable working capital may change from one asset to another and changes with the increase or decrease in the volume of business. The variable working capital may also be subdivided into following two sub-groups.

**i. Seasonal Variable Working capital:**

Seasonal working capital is the additional amount which is required during the active business seasons of the year. Raw materials like raw-cotton or jute or sugarcane are purchased in particular season. The industry has to borrow funds for short period. It is particularly suited to a business of a seasonal nature. In short, seasonal working capital is required to meet the seasonal liquidity of the business.

**ii. Special variable working capital:**

Additional working capital may also be needed to provide additional current assets to meet the unexpected events or special operations such as extensive marketing campaigns or carrying of special job etc.

### 3.2.2. On the basis of concept

On the basis of concept working capital is divided into two Categories as under:

1. Gross working capital

2. Net working capital

**Gross working capital** refers to total investment in current assets. The current assets employed in business give the idea about the utilization of working capital and idea about the economic position of the company. Thus, gross working capital the amount of funds invested in different current assets. Gross working capital concepts is popular and acceptable concept in the field of finance.

**Net working capital** means current assets minus current liabilities. The difference between current assets and current liabilities is called the net working capital. If the net working capital is positive business is able to meet its current liabilities. Net working capital concept provides the measurement for determining the creditworthiness of Company.

## 3.3 Factors Determining Working Capital

The following factors determine the requirement of working capital:

**i. Nature of Companies:** Needs for working capital are determined by the nature of an enterprise. Small companies have smaller proportions of cash, receivables and inventory than large corporation. This difference becomes more marked in large corporations. A public utility, for example, mostly employs fixed assets in its operations, while a merchandising department depends generally on inventory and receivable.

**ii. Nature and Size of Business:** The working capital requirements of a firm are basically influenced by the nature of its business. Trading and financial firms have a very less investment in fixed assets, but require a large sum of money to be invested in working capital. Retail stores, for example, must carry large stocks of a variety of goods to satisfy the varied and continues demand of their customers.

**iii. Time:** The level of working capital depends upon the time required to manufacturing goods. If the time is longer, the size of working capital is great. Moreover, the amount of working capital depends upon inventory turnover and the unit cost of the goods that are sold.

**iv. Volume of Sales:** This is the most important factor affecting the size and components of working capital. The volume of sales and the size of the working capital are directly related to each other. As the volume of sales increase, there is an increase in the investment of working capital-in the cost of operations, in inventories and receivables.

**v. Terms of Purchases and Sales:** If the credit terms of purchases are more favorable and those of sales liberal, less cash will be invested in inventory. With more favorable credit terms, working capital requirements can be reduced.

**vi. Business Cycle:** Business expands during periods of prosperity and declines during the period of depression. Consequently, more working capital required during periods of prosperity and less during the periods of depression.

**vii. Liquidity and Profitability:** If it is interested in improving its liquidity, it can increase the level of its working capital. However, this policy is likely to result in a reduction of the sales volume, and therefore, profitability. A firm should choose between liquidity and profitability and decide about its working capital requirements accordingly.

## 3.4 Components of Working Capital Management

**1. CASH MANAGEMENT**

The term cash management refers to the process of collecting and managing cash flows. Cash management can be important for both individuals and companies. It is a key component of a company's financial stability in business. Cash is also essential for people's financial stability while also usually considered as part of a total wealth portfolio.

**2. INVENTORY MANAGEMENT**

[Inventory management](https://www.investopedia.com/articles/investing/020116/how-analyze-companys-inventory.asp) refers to the process of ordering, storing, using, and selling a company's inventory. This includes raw materials, components, and finished products, as well as the warehousing and processing of these items.

**3. RECEIVABLES MANAGEMENT**

Management of Receivables refers to planning and controlling of debt owed to the firm from customer on account of credit sales. When large amounts of money are tied up in receivables, there are chances of bad debts. On the contrary, if the investment in receivables is low, the sales may be low since competitors offer liberal terms. Therefore, management of receivables require proper policies and their implementation.

There are basically three aspects of receivables management:

### Credit Policy

* Credit Analysis
* Control of Receivables

4. PAYABLES MANAGEMENT

Accounts payable management is a system that deals with a business's debts to third-party vendors or suppliers that it made on credit and hasn't paid back yet. These debts might include expenses that have accumulated, purchases of inventory or supplies and short-term operations costs. Accounts payable management includes managing purchases, looking for trade credit lines and arranging favorable purchase terms. All the expenses that a company owes appear on their balance sheet as their "accounts payable balance."

5. DISTRIBUTION MANAGEMENT

Disbursement means paying out money. The term disbursement may be used to describe money paid into a business' operating budget, the delivery of a loan amount to a borrower, or the payment of a dividend to shareholders. Money paid by an intermediary, such as a lawyer's payment to a third party on behalf of a client, may also be called a disbursement.

To a business, disbursement is part of cash flow. It is a record of day-to-day expenses. If cash flow is negative, meaning that disbursements are higher than revenues, it can be an early warning of insolvency. A disbursement is the actual delivery of funds from a bank account.

## 3.5. How disbursement works?

In bookkeeping, a disbursement is a payment made by the company in cash or cash equivalents during a set time period, such as a quarter or a year. A bookkeeper records each transaction and posts it to one or more ledgers, such as a cash disbursement journal and the general ledger.

An entry for a disbursement includes the date, the payee name, the amount debited or credited, the payment method, and the purpose of the payment. The overall cash balance of the business is then adjusted to account for the disbursement.

Disbursements are a record of the money flowing out of the business and may differ from actual profit or loss. For example, Apex and Bata Limited. Using the accrual method of accounting reports expenses when they occur, not necessarily when they are paid, and reports income when it is earned, not when it is received.

The type of items listed in the ledger depends on the business. A retailer has payments for inventory, accounts payable, and salaries. A manufacturer has transactions for raw materials and production costs.

Managers use the ledgers to determine how much cash has been disbursed and to track it. For example, management can see how much cash is being spent on inventory compared to other costs. Since the ledger records the numbers of the checks issued, the managers also can see whether any checks are missing or wrongly recorded.

# 

# Chapter: 4

## Cash Forecasting

## 4.1. What is cash forecasting?

Cash flow forecasting is the process of estimating the flow of cash in and out of a business over a specific period of time. An accurate cash flow forecast helps companies predict future cash positions, avoid crippling cash shortages, and earn returns on any cash surpluses they may have in the most efficient manner possible.

## 4.2. Why cash forecasting is important?

Cash forecasting is valuable for companies of all sizes, local small businesses as well as large multinational corporations. First, it is a way to make sure your business never runs out of cash unexpectedly and can deal with its payment obligations. It is also an excellent way to optimize the amount of working capital, to have enough to run the business but no cash laying on accounts purposelessly. Cash flow forecasting can be and should be done on short term as well as long term. Being able to present a reliable cash flow forecast can also be valuable when negotiating external funding.

## 4.3. Monitoring Accounts Receivables

Accounts receivable, your customer’s unpaid invoices, are a short-term asset on the balance sheet of your company. At any time, you should know exactly what that line item is comprised of. It is also convertible into cash upon collection and therefore is of great importance to cash flow and your ability to fund operations adequately.

Many customers pay within specified terms, i.e., within 30 days, but unfortunately, some do not, resulting in an increasing accounts receivable balance and potential cash flow management problems. While an increase in A/R is favorable when due to increased revenue, it is not if due to increased payment delays from customers. This is one reason that accounts receivable should be monitored closely.

## 4.4. Why Carry Inventory?

Inventory refers to all the items, goods, merchandise and materials held by a business for selling in the market to earn profit.

. Inventory represents a costly investment to the firm. This includes the raw materials inventory, working process inventory and finished goods inventory. Raw materials inventory is the total cost of all component currently in stock that have not yet been used in work-in-progress or finished goods production.

Carry Inventory is important

• To ensure smooth production

• To provide quick customer service.

• To facilitate production during lead time

To enjoy the economies of large-scale buying Inventory management is mostly important for pharmaceuticals companies.

## 4.5. Just in Time System

Just-in-time system one of the most and newest interesting alternatives to holding inventory is to use just in time system. The just in time or JIT is an inventory management system whereof in the material or the products are proceeding and acquired just a few hours before they are put to use. The just in time system adopted by the firms to reduce the unnecessary burden of inventory management. In case the demand is less than the inventory raised.

# Chapter: 5

## The Firms Level of Aggregate Liquidity

PERFORMANCE *ANALYSIS* OF Bata LTD.

As discussed earlier, working capital mainly refers to the “Net Working Capital”. Net working capital is calculated by subtracting Current Liabilities from Current Assets.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Current Asset: |  |  |  |  |  |  |  |  |  |  |
| Inventory | 2504 | 2345 | 7046 | 6788 | 7054 | 2929 | 8390 | 8736 | 6082 | 8709 |
| Trade receivables | 801 | 758 | 584 | 696 | 671 | 886 | 652 | 612 | 793 | 717 |
| Bank balances and others | 650 | 531 | 0 | 0 | 4592 | 5341 | 7804 | 9473 | 10391 | 9470 |
| Short-term loan | 1109 | 2048 | 319 | 408 | 32 | 37 | 37 | 71 | 123 | 0 |
| Cash and Cash Equivalents | 932 | 2086 | 2099 | 3405 | 616 | 543 | 585 | 150 | 544 | 177 |
| Others financial assets | 60 | 100 | 87 | 101 | 261 | 331 | 441 | 477 | 221 | 262 |
| Others current assets | 100 | 64 | 0 | 0 | 266 | 713 | 462 | 473 | 412 | 622 |
| Total Current Assets | 6157 | 7932 | 10137 | 11400 | 13495 | 15475 | 18374 | 19996 | 18570 | 19959 |
|  |  |  |  |  |  |  |  |  |  |  |
| Current Liability: |  |  |  |  |  |  |  |  |  |  |
| Trade Creditors | 1086 | 1717 | 3566 | 3247 | 4072 | 4791 | 5155 | 7168 | 6112 | 6589 |
| Provisions and tax Liabilities | 500 | 340 | 757 | 614 | 156 | 282 | 512 | 148 | 261 | 268 |
| Liabilities for other finance | 770 | 980 | 742 | 850 | 703 | 526 | 680 | 685 | 739 | 491 |
| Total Current Liability | 2356 | 3037 | 5175 | 4605 | 4933 | 5602 | 6295 | 8005 | 3179 | 8170 |
| *Net Working Capital* | 3801 | 4895 | 4962 | 6795 | 8562 | 9873 | 12079 | 11991 | 51897 | 11789 |

**Interpretation:** From 2013 the Company had a steady positive growth in net working capital. This is a good sign for company and its investor. A positive result means the company has enough current assets and money left over after paying its current liabilities. A negative result means the company does not have enough current assets to pay its current liabilities, which means it may need additional funds.

## CURRENT RATIO:

The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It tells investors and analysts how a company can maximize the current assets on its balance sheet to satisfy its current debt and other payable. It is expressed as:

Formula

Now let’s see “**Bata Ltd*”*** 10 years. Current ratio :

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| Current Assets | 6157 | 7932 | 10137 | 11400 | 13495 | 15475 | 18374 | 19996 | 18570 | 19959 |
| Current Liabilities | 2356 | 3037 | 5175 | 4605 | 4933 | 5602 | 6295 | 8005 | 3179 | 8170 |
| Current Ratio | 2.61 | 2.6 | 1.96 | 2.48 | 2.74 | 2.76 | 2.92 | 2.51 | 5.84 | 2.44 |

**Interpretation:** At first, the current ratio describes the relationship between a company's assets and liabilities. Well, the Current ratio gives us understanding of cash rich is the company. Gives the idea about company's operating cycle and management efficiency. The current ratio > 2.0 - After 2.0 the current ratio starts to deteriorate because it suggests that too much money is tied up in current Assets. Or may be too much working capital. If current ratio > 1.5 - When the current ratio is between 1.5 and 2.0, a company is efficiently managing its working capital. If current ratio > I -An ideal current ratio is between 1.0-1.5 If current ratio <1 -A mismanagement of working capital. The company has liquidity problems. In Square pharmaceuticals, we see only in 2012-2013, the current ratio is 1.58. In the next 9 year. The current ratios are more than 2.0, and they are consecutively 2.61, 2.6, 1.96, 2.48, 2.74, 2.76, 2.92, 2.51, and large ratio 5.84 and the last one 2.44. So, it is a probable situation that company prefers to have a high current ratio to pay its current liabilities. But while a high current ratio may seem positive at first glance, it can have both advantages and disadvantages. Disadvantages include inefficient use of resources, depreciation, and low return on assets.

## QUICK RATIO:

The quick ratio is also an indicator of a company’s short-term liquidity position 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”. It is expressed as:

Formula

Now let’s see “**Bata Ltd*”*** 10 years Quick Ratio :

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| Current Assets | 6157 | 7932 | 10137 | 11400 | 13495 | 15475 | 18374 | 19996 | 18570 | 19959 |
| Current Liabilities | 2356 | 3037 | 5175 | 4605 | 4933 | 5602 | 6295 | 8005 | 3179 | 8170 |
| Inventory | 2504 | 2345 | 7046 | 6788 | 7054 | 2929 | 8390 | 8736 | 6082 | 8709 |
| Quick Ratio | 1.51 | 1.61 | .60 | 1.00 | 1.31 | 2.24 | 1.59 | 1.41 | 3.93 | 1.37 |

**Interpretation:** Quick or Acid Test ratio is the proportion of the quick current liabilities of a business. This ratio helps to determine whether or not a company has enough liquidity to meet it short term liabilities. The more the quick ratio the better it is for a firm. A low ratio on the other hand, could mean that the company is over leveraged credit policies are not good. In 2015, the quick ratio is 0.6 is less than 1 means it doesn't have enough quick assets to meet all its short-term obligations. In 2016, the quick ratio is 1.00 that means current assets 1.00 the amount of current liabilities. In 2021, the quick ratio is 3.93 that means current assets 3.93 the amount of current liabilities. It’s good for a firm. This is generally considered a healthy financial position. In the next 8 years, the ratio is increasing but slightly decrease in 2022. It’s a good sing for the company because, it suggests that the company has a substantial buffer to comfortably meet its short-term financial Commitments. It needs to be considered that very high ratio could indicated the company is resting on a significant amount of cash.

## CASH RATIO:

The cash ratio is a liquidity ratio that measures a company's ability to pay off its short-term debt obligations using only cash and cash equivalents. It is calculated by dividing the company's total cash and cash equivalents by its total current liabilities.

The cash ratio is a more conservative measure of liquidity than other ratios, such as the current ratio and quick ratio, because it only considers a company's most liquid assets. A cash ratio of 1 means that a company has enough cash and cash equivalents to cover its current liabilities. A higher cash ratio is generally considered to be better, as it indicates that a company has a strong liquidity position.

Formula

Now let’s see “**Bata Ltd”**10 years Cash Ratio :

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| Cash and Cash Equivalents | 932 | 2086 | 2099 | 3405 | 616 | 543 | 585 | 150 | 544 | 177 |
| Current Liabilities | 3793 | 3417 | 5175 | 4605 | 4933 | 5602 | 6295 | 8005 | 3179 | 8170 |
| Cash Ratio | 2.45 | 9.03 | 4.1 | 7.4 | 1.2 | 1.1 | 1.0 | 0.2 | 1.7 | 0.2 |

**Interpretation:** Cash ratio indicates a liquidity measure that shows a company's ability to cover its short- term obligations using only cash and cash equivalent. If cash ratio >1 the company has financial well and can pay its liabilities. If cash ratio = 1: The company has sufficient cash to cover its liabilities. If current ratio<1: The company doesn’t have enough cash to repay its liabilities. In square pharmaceuticals, the cash ratio was 0.2, 0.2 consecutively in 2020 and 2022 which are less than 1. This not good sign and position to repay its liabilities and this is too risky for the company and have the chance of default. However, the company then in the remaining following years improved gradually day by day. The following ratio were 2.45, 9.03, 4.1, 7.4, 1.2, 1.1, and 1.7. So, the paying liabilities ability are getting well in square pharmaceuticals.

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## FIXED ASSETS TURNOVER:

Fixed asset turnover is the ratio of net sales divided by net fixed assets. This ratio is one of the efficiency ratios used by analysts to determine the overall effective utilization of the resources by a company. It measures the productivity of the company’s fixed assets to generate revenue. In other words, it indicates how efficiently the management has been able to put to use its fixed investments to earn more and more revenue. It is expressed as:

Formula

Now let’s see “**Bata Ltd*”*** 10 years **Fixed asset turnover :**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| Net Sales | 21298 | 27808 | 24753 | 25438 | 26872 | 29970 | 31223 | 18013 | 24436 | 34889 |
| Net Fixed Assets | 673333 | 673487 | 598452 | 582503 | 573022 | 597284 | 641168 | 1735341 | 1476938 | 1528697 |
| Fixed Assets Turnover | 3.1times | 4.1times | 4.1times | 4.3times | 4.6times | 5times | 4.8times | 1times | 1.times | 2.2times |

**Interpretation:** Fixed asset turnover is a financial ratio that measures a company’s efficiency in using its fixed assets, such as property, plant, and equipment, to generate revenue. A higher fixed asset turnover ratio indicates that a company is utilizing its fixed company generated $3.10 in sales for every dollar invested in fixed assets. This shows a reasonable level of efficiency. **2013-2014**: The ratio increases to 4.1, suggesting improved efficiency in utilizing fixed assets to generate sales. **2014-2015**: The ratio remains at 4.1, indicating that the company maintained its efficiency level from the previous year. **2015-2016**: A slight increase to 4.3 suggests ongoing improvement in asset utilization. **2016-2017**: The ratio rises again to 4.6, indicating strong performance in leveraging fixed assets for sales generation. **2017-2018**: A further increase to 5.0 indicates peak efficiency in this period, with the company effectively maximizing its asset use. **2018-2019**: The ratio drops to 4.8, which still shows good efficiency but indicates a slight decline compared to the previous year. **2019-2020**: A significant decrease to 1.0 indicates a sharp decline in efficiency. This could suggest over-investment in fixed assets relative to sales or a decline in sales revenue. **2020-2021**: The ratio remains at 1.0, showing that the company is still struggling to utilize its fixed assets effectively. **2021-2022**: A recovery to 2.2 indicates some improvement, but it’s still far from the higher efficiency levels seen earlier in the decade.

## NET LIQUID BALANCE RATIO:

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

Now let’s see “**Bata Ltd*”*** 10 years Net Liquidity Balances :

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| Cash | 932 | 2086 | 2099 | 3405 | 616 | 543 | 585 | 150 | 544 | 177 |
| Total Assets | 3793 | 3417 | 5175 | 4605 | 4933 | 5602 | 6295 | 8005 | 3179 | 8170 |
| Net Liquid Balance Rate | 0.039 | 0.069 | 0.41 | 0.74 | 0.12 | 0.11 | 0.09 | 0.02 | 0.17 | 0.02 |

**Interpretation:** This index measures center on the firm's balance of cash and marketable security. This ratio of cash and Represents the firm's true reserve against unanticipated cash needed. In 2013 and 2014, the Net Liquid Balance ratio are 0.039, 0.069, 0.09, 0.02, and 0.02. These are low for the company to meet its liquidity. But in the next three years, the ratios are increasing gradually and these are 0.09, 0.02 and 0.02 as cash is increasing in proportion to total assets (2014, 2015 and 2020). But in 2021, the ratio is increasing it slows down sings gradually again. As a result, it’s slows down. And in 2022 it slightly because of slight change. So, the overall situation of NLBR is more or less good. Because, the ratios are less than 1. But ratios are improving in overall.

## ACCOUNTS RECEIVABLE TURNOVER:

The accounts receivable turnover ratio measures a company's effectiveness in collecting its receivables or money owed by clients. The ratio shows how well a company uses and manages the credit it extends to customers and how quickly it is collected or being paid. The higher the turnover, the quicker is a receivable turned into cash, and the more liquid is the firm said to be. This ratio is usually calculated as.

Formula

Now let’s see “**Bata Ltd*”*** 10 years. **Account Receivable Turnover :**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Years | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| Sales | 21298 | 27808 | 24753 | 25438 | 26872 | 29970 | 31223 | 18013 | 24436 | 34889 |
| Accounts Receivables | 801 | 758 | 584 | 696 | 671 | 886 | 652 | 612 | 793 | 717 |
| Accounts Receivables Turnover | 27 | 37 | 42 | 37 | 40 | 34 | 48 | 29 | 31 | 49 |

**Interpretation:** The accounts receivable turnover ratio is an accounting measure used to quantify how efficiently a company in collecting receivable from its clients. The ratio measures the number of times that receivables are converted to cash during a certain time period. So, more accounts receivable turnover is better, it means company is getting 4 cash company more frequently.

## INVENTORY TURNOVER:

Inventory turnover is a ratio showing how many times a company has sold and replaced inventory during a given period. It measures the activity, or liquidity of a firm's inventory. The higher the turnover, the more liquid the asset. The resulting turnover is meaningful only when it is compared with that of other firms in the same industry or to the firm's past inventory turnover. It is calculated as:

Formula

Now let’s see “**Bata Ltd”**10 years **Inventory Turnover:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Years | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| COGS | 101336 | 11727 | 14370 | 15001 | 14824 | 15598 | 197110 | 22536 | 24800 | 27958 |
| Inventory | 2504 | 2345 | 7046 | 6788 | 7054 | 2929 | 8390 | 8736 | 6082 | 8709 |
| Inventory Turnover | 4 | 5 | 5.4 | 5.1 | 5 | 4.3 | 4.3 | 4 | 3 | 3 |

## INVENTORY COLLECTION PERIOD:

Inventory collection period is a financial metric that measures the average number of days it takes a company to collect payment from its customers for inventory that has been sold. It is calculated by dividing the average accounts receivable balance by the net credit sales and multiplying the quotient by the number of days in the period.

The inventory collection period is an important measure of a company's liquidity and financial health. A longer inventory collection period indicates that the company is having difficulty collecting payments from its customers, which can lead to cash flow problems. A shorter inventory collection period indicates that the company is collecting payments from its customers quickly, which can improve its liquidity and financial health.

Formula

Now let’s see “**Bata Ltd*”*** 10 years. **Inventory collection period**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Years | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| Inventory Turnover | 4 | 5 | 5.4 | 5.1 | 5 | 4.3 | 4.3 | 4 | 3 | 3 |
| Inventory Collection Period | 90 | 72 | 66.67 | 70.59 | 72 | 83.72 | 83.72 | 90 | 120 | 120 |

**Interpretation:** The inventory turnover period is the time required to obtain materials for a product manufacture it and sell it. In another word it is measure of how long a company takes on average to sell its inventory. So, the smaller inventory conversion period is good for the company's working capital here.

## AVERAGE COLLECTION PERIOD:

The average collection period (ACP) is a financial metric that measures the average number of days it takes a company to collect payment from its customers for credit sales. It is calculated by dividing the average accounts receivable balance by the net credit sales and multiplying the quotient by the number of days in the period.

Formula

Now let’s see “**Bata Ltd*”*** 10 years. **Average collection period**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Years | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| Accounts Receivables Turnover | 27 | 37 | 42 | 37 | 40 | 34 | 48 | 29 | 31 | 49 |
| Average Collection Period | 13.33 | 9.72 | 8.6 | 9.72 | 9 | 10.9 | 7.5 | 12.4 | 11.61 | 7.35 |

**Interpretation**: In general, a shorter average collection period is often considered better because it indicates that a company is collecting payments from its customers more quickly. This can lead to improve cash flow and financial stability.

## 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 :**(𝒂𝒈𝒆 𝑪𝒐𝒍𝒍𝒆𝒄𝒕𝒊𝒐𝒏 𝑷𝒆𝒓𝒊𝒐𝒅 + 𝑰𝒏𝒗𝒆𝒏𝒕𝒐𝒓𝒚 𝑪𝒐𝒏𝒗𝒆𝒓𝒔𝒊𝒐𝒏 𝑷𝒆𝒓𝒊𝒐𝒅) −

𝑷𝒂𝒚𝒎𝒆𝒏𝒕 𝑫𝒆𝒇𝒇𝒆𝒓𝒂𝒍 𝑷𝒆𝒓𝒊𝒐𝒅

Now let’s see “**Bata Ltd*”*** 10 years. **Cash Conversion Cycle**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2012-2013 | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 | 2019-2020 | 2020-2021 | 2021-2022 |
| Cash Conversion Period | 19.64 | -11.51 | -54.37 | -30.2 | -38.79 | -34.67 | -23.75 | -25.47 | 85.47 | 22.15 |

**Interpretation:** The cash conversion cycle is a formula in management accounting that measure how efficiently a company's managers are managing its Working capital. The CCC measures the length of time between a Company's purchase of inventory and the receipt of cash from its account receivable. A shorter CCC means more efficiency at managing working capital while a longer cycle is an indication of less efficiency. **2012-2013**: The Company took about 20 days to convert cash investments into cash from sales, indicating decent efficiency. **2013-2014**: The period improved significantly to around -11.5 days, meaning the company received cash before it had to pay for inventory, which is very positive. **2014-2015**: It improved further to about -54.4 days, showing excellent cash conversion efficiency. **2015-2016**: The period was around -30.2 days, indicating continued strong performance, though there was a slight decline in efficiency. **2016-2017**: The cash conversion period increased slightly to about -38.8 days, still reflecting good performance.

## Comprehensive liquidity Index:

The comprehensive liquidity index assesses a company's overall liquidity position by considering various factors, including current assets, quick assets, cash reserves, and the company’s ability to meet short-term obligations.

A higher index indicates better liquidity, suggesting that the company can easily cover its liabilities. Conversely, a lower index may signal potential liquidity issues, indicating challenges in meeting obligations without relying on longer-term assets.

To evaluate the comprehensive liquidity index effectively, it’s important to analyze trends over time, as fluctuations can highlight changes in financial health and management strategies. This index serves as a crucial tool for investors and stakeholders to gauge a company's financial stability and operational efficiency.

Now let’s see “**Bata Ltd*”*** 10 years. **Comprehensive liquidity index**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 2014-2015 | 2015-2016 | 2016-2017 | 2017-2018 | 2018-2019 |  |  |  |  |  |
| comprehensive liquidity index | 1.43 | 2.1 | 0.88 | 0.2 | 0.78 |  |  |  |  |  |

**Interpretation:** The comprehensive liquidity index from 2014 to 2019 shows a mixed performance in the company's liquidity position.

In 2014-2015, the index started at 1.43, indicating a reasonable ability to cover short-term liabilities. This improved significantly to 2.1 in 2015-2016, reflecting a strong liquidity position and ample liquid assets relative to obligations.

However, the index declined sharply to 0.88 in 2016-2017, falling below 1 and signaling potential liquidity concerns. This downward trend continued dramatically in 2017-2018, with the index plummeting to 0.2, suggesting severe challenges in meeting short-term liabilities.

In 2018-2019, the index rose slightly to 0.78, but it still remained well below the ideal level, indicating ongoing liquidity issues. Overall, the data highlights a significant deterioration in liquidity over this period, particularly in the latter years, which suggests the need for improved cash management and financial strategies.

# Chapter- 6

## Findings and recommendations

Here’s an analysis of the financial data for Bata Limited and Apex Limited from 2013 to 2022, along with findings and recommendations.

**Findings**

❖ We found that Bata keeps low cash in hand.

❖ They are heavily investing for expanding their business and reducing dependability of foreign raw materials in recent years, that could cause liquidity issue. But this will also reduce their additional cost of importing materials.

❖ Though it is stated in their report that receivables are collected within 11.6 days on average. Our data Shows that, their average receivable turnover is more than 36 days, with the exception on year 2022.

❖ Bata’s accounts payable is also increasing year by year, with the exception of recent year.

❖ Their inventory turnover is also lower than the competitors from the same industry.

**Recommendations**

❖ Bata should be careful about their liquidity.

❖ Bata should be more efficient in collecting account receivables. They should rework on their sales term policy.

❖ As their accounts payable is rising year by year, they should be more efficient in paying the creditors.

❖ BAT should also consider investing more for short term.

# Chapter-7

## Conclusion

Both companies have strengths and weaknesses that can be addressed through strategic improvements in profitability, liquidity, and operational efficiency. By implementing the recommendations, they can enhance their financial health and competitive positioning in the market.

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