

**A STUDY ON THE EFFECTIVENESS OF WORKING CAPITAL MANAGEMENT  
OF SYNTHITE INDUSTRIES PRIVATE LIMITED**

**PROJECT REPORT**

*Submitted to Mahatma Gandhi University in partial fulfillment  
of the requirements for the award of the Degree of  
MASTER OF BUSINESS ADMINISTRATION*

Submitted by

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**Accredited by NAAC with 'A' Grade  
DEPARTMENT OF MANAGEMENT STUDIES  
MAR ATHANASIOS COLLEGE FOR ADVANCED STUDIES  
TIRUVALLA**

**2021**



# MAR ATHANASIOS COLLEGE FOR ADVANCED STUDIES TIRUVALLA

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## CERTIFICATE

*This is to certify that the project report entitled "A Study on the Effectiveness Of Working Capital Management Of Synthite Industries Private Limited" is a bonafide report of the project work undertaken by AMALA ELSA ALEX, fourth semester MBA student of our college during a period of 8 weeks commencing from 1<sup>st</sup> April to 30<sup>th</sup> May, 2021.*

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## DECLARATION

I hereby declare that this project report entitled "**A STUDY ON THE EFFECTIVENESS OF WORKING CAPITAL MANAGEMENT OF SYNTHITE INDUSTRIES PRIVATE LIMITED**" is a *bonafide* report of the study undertaken by me, under the guidance of **MR. JIBUMON K G**, Department of Management Studies, MACFAST, Tiruvalla.

I also declare that this project report has not been submitted to any other University or Institute for the award of any degree or diploma.



Place :Tiruvalla

Date : 31/05/2021

AMALA ELSA ALEX

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**AMALA ELSA ALEX**

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**CHAPTER 1**  
**INTRODUCTION**

## **1.1 BACKGROUND OF THE STUDY**

Working capital is a measurement of an entity's current assets, after subtracting its liabilities. Sometimes referred to as operating capital, it is a valuation of the amount of liquidity a business or organization has for the running and building of the business. Generally speaking, companies with high amount of working capital are better positioned for success. They have the liquid assets needed to expand their business operations as desired.

Working capital measures how many liquid assets a company have available to build its business. Working capital can be positive or negative, depending on how much short-term debt the company is carrying. In general, companies that have a lot of working capital will be more successful since they can expand and improve their operations. Companies with negative working capital may lack the funds necessary for growth.

Working capital is one among the many important things that contribute to the success of a business. Without it, a business may cease to function properly or at all. Not only does a lack of working capital renders a company unable to build and grow, but it may also leave a company with a very low amount of working capital may be at risk of running out of money. When a company has too little working capital, it can face financial difficulties and may even be forced toward bankruptcy.

Implementing an effective working capital management system is an excellent way for many companies to improve their earnings. The two main aspects of working capital management are ratio analysis and management of individual 2 components of working capital. The working capital management helps to exploit good opportunities, meet unseen contingencies, increase efficiency of fixed assets, increase production efficiency and last not the least it helps in creating sound goodwill and debt capacity. In simple words, working capital.

In simple words, working capital refers to the part of firm's capital which is required for financing short term or current assets such as cash, marketable securities, debtors and inventories. Funds thus invested in current assets keep revolving fast and are being constantly converted into cash and this cash flow out again in exchange for other current assets.

This project tries to analyse the working capital management of Synthite Industries Ltd. The project deals with the effectiveness of working capital and its management in Synthite Industries Ltd and how the working capital affects the firms as it is the most needed form of resources for the day-to-day operations of the firm.

## **1.2 STATEMENT PROBLEM STATEMENT**

The problem under study is “The effectiveness of working capital management in Synthite Industries Private Limited”. The study is based on the financial statements of Synthite Industries. The study deals with the detailed analysis of the factors of working capital and how the company effectively manages the working capital. The analysis was done using financial statements of the company for the period from 2014-2019.

## **1.3 RELEVANCE SCOPE OF THE STUDY**

A company’s working capital, profitability, solvency, liquidity and efficiency can be evaluated only through the financial statements. This study helps to compare the financial statements of past five years using ratio analysis.

- The study attempts to understand the working capital position of the company.
- To analyze the liquidity, profitability, solvency and operational efficiency of the company.

## **1.4 OBJECTIVES OF THE STUDY**

1. To ascertain the liquidity position of the company.
2. To analyze the solvency position of the company.
3. To analyze the operational efficiency of the company.
4. To analyze the profitability position of the company.

**CHAPTER 2**  
**INDUSTRY PROFILE**

## **2.1 BUSINESS PROCESS OF THE INDUSTRY**

Spice trade is a commercial activity of ancient origin which involves the merchandising of spices and herbs. Spices such as cinnamon, cassia, cardamom, ginger and turmeric were known, and for commerce, in the eastern world well into antiquity.

Spices are strongly flavoured and aromatic part of a plant used in small quantities as either a preservative or flavouring in cooking.

Spice industry has been witnessing phenomenal growth rates both in the international and domestic sector. The growth in this sector can be attributed to the change in the life style patterns of the consumers all over the world. The shift in the consumption trend toward natural products has also contributed to the increased global demand of the spices and herbs. Spices and derivative market are blooming because these products find applications in a number of industries including pharmaceutical, medicine, beverages, food processing, personal hygiene products to name a few.

**International Scenario** The spice industry has been witnessing phenomenal growth rates in the international sectors. The changing scenario of World Trade will now demand Globalization of Market and open economy.

The global spice and culinary herb industry comprise of many plants having diverse end use including culinary, medicinal etc. The industry also consists of spice derivatives like essential oils, oleoresin, spice oils etc. According to international trade estimate about 85% of spices and culinary herbs are traded in dried form. There is no doubt that these new developments will provide unlimited export opportunities, to producing country like India, which gifted with the 7 varying soil and climatic condition Spice extracts were developed to meet the new demand of the Food Processing Industry. Compares to whole spice they have more consistency in flavour, much longer shelf, easier storage and handling and not affected by bacterial contamination. The Food Industry across the globe is turning more and more to spice oils and oleoresins to create newer varieties of food. New flavour systems are being developed to introduce new products in the market and create competitive advantages have vast natural resources.

The world production and processing centres of spices and culinary herbs remain concentrated in Europe and in a number of Asian countries. Canada is fast emerging as one of the leading

players in the international spice and herb industry. There are certain countries acting as leading producers and traders of some particular spices and culinary herbs. For example, India is popularly known for being a source of cloves, Indonesia has supplied the global market with cinnamon and China has been the leading provider of ginger.

#### National Scenario

India is famous for its spices that are widely used in industries like pharmaceuticals, nutraceutical, perfumery, toiletry and cosmetics. Indian spices are one of the major suppliers of pepper to a large number of countries. The Indian spice industry is booming with substantial increase in exports over the past few years. India accounts for nearly 45% and 30% of volume and value in the world spice trade. India has traditionally been known for its spice and culinary herb production. It is one of the largest spices producing and consuming country. Its strategic location, climatic conditions, advanced production processes and availability of cheap labour makes it advantageous for the producers to ensure large scale production of quality spices and herbs.

The Indian spice market has shown remarkable growth in spices and culinary herbs exports. Indian spices manufacturers are making substantial effort to improve the quality of spices backed up by technological advancement in order to tap international market. The booming global spice market also poses good opportunities for the Indian spice industry to provide quality spices at competitive prices. India faces stiff competition from China, Malaysia and Pakistan in terms of pricing of the products. Manufacturers should therefore ensure consistency in supply, product quality, pricing and marketing strategy to increase the share in exports. India is also leading in the field of spice derivative, meeting almost 70% of the total demand of spices oil and oleoresins. Producers are incorporating latest methods and technologies to ensure higher quality of spices and herbs.

India is one of the prime exporters of pepper, chilies, turmeric, seed spices and spice derivatives to the rest of the world. USA Japan and Sri-lanka import these Indian spices in large volumes. Indian Government is providing financial assistance to farmers, growers and spice producers and has also taken certain steps to ensure the availability of better-quality spices, more hygienically processed spices in order to boost exports, Indian spice Board also provide

financial and technical assistance to farmer. India is one of the major Asian production and trading centre of spices, its derivatives and also culinary herbs. India 's spice exports account for about 39% of the total exports in terms of volume and around 22% in terms of exports value. India meets almost 65% of the global demand for derivatives like spice oils and oleoresins.

### **India's Exports**

India 's Exports—Segment wise. According to the data released by the Spices Board, India's exports of spices registered a growth of 28.06 per cent over the previous year when the same reached a level of Rs 4,837.50 crore as against Rs 3,775.65 crore in the previous year. A glance at the table reveals that Mint products emerged as the topmost item of exports and had registered a steep growth of 18.36 per cent over the previous year by reaching a level of Rs 1,336.50 crore as against Rs1,240.95 crore in the previous year. Other spices showing a significant growth during the period comprised: pepper (69.66%), coriander (49.75%), cumin (46.67%), chilly (37.87%), curry power, paste and condiments (28.69%), and fenugreek (22.27%). On the other hand, spices going a steep fall during the period comprised: garlic (82.20%), Nutmeg & mace (33.73%), and Ginger fresh/dry (27.56%).

### **State Scenario**

Kerala is a land of spices considering the large variety of spice grown in the state. Today there are as many as 26 Indian spices that are greatly in demand indifferent countries. India is the single largest source of spices in the world. From the ancient times Kerala had trade relations with Persia, ancient Europe, ancient Singapore and other Eastern countries. Kerala attracted foreigners only because of its abundant resources of spices. Pepper or Black Gold 'as it is otherwise known is the sole reason why the Europeans were particular in building the Suez Canal so that they could reach the coast of Kerala with very less amount of time. Kerala plays a major role in the production and export of spices from India. Human substance pattern in Kerala were shaped primarily by its physical, climatic and ecological characteristics. The greatest natural endowment of this humid –tropic region was the existence of a high degree of biodiversity.

The agricultural settlements of Kerala which evolved nearly 2000 years ago have depended on this bio diversity as their prime resource. Kerala is renowned the world over for being the major producer and exporter of pepper, better known as the king of spices. The most popular among the spices are pepper, cardamom, turmeric, chilies and ginger. Pepper, known as the king of spices is perhaps the world 's oldest known spice and is cultivated in over 158000 hectares in Kerala, which account for 96% of the total production in the country. There are a lot of opportunities for investors in the spice sectors and spices Board, the caretaker of the sectors in India.

### **Market Demand and Supply - Contribution of GDP**

Kerala-based Synthite Industries Ltd, with diversified interests in spices, oleoresins, flavours and hospitality, is eyeing an ambitious turnover of Rs 3,000 crore by 2020, and plans to explore the Middle East and North African markets soon.

With a portfolio of about 500 products, including spices raw, sterilised and powdered form, spice oleo-resins, organic extracts, health ingredients, essential oils, natural food colours, floral concentrates, absolutes and resinodis, the Rs 1,000-crore group is hopeful of achieving its target by 2020, Director, Viju Jacob, told PTI.

Synthite, which last year opened its first overseas plant at Korla in China's Xinjiang province, an important centre for Paprika production, would launch its new manufacturing unit in Indonesia

80% of revenue are from the bio-ingredients division, including Spice Oleoresins, essential oils, natural colours, organic certified extracts and beverage flavourings,

The group has six manufacturing units two in Kerala Kolenchery and Kozhikode, one each in Marudur in Coimbatore, Ongole in Andhra Pradesh and Harihar in Karnataka and in China with a total combined annual capacity of 38,000 tonnes.

On the Chinese plant, they have the support of the Local government that is committed to promote agricultural and industrial projects in Xinjiang. Their employees from China run this plant.

Since they have a new plant, expect to cater to the Chinese market from there adding all their plants are located in places where there is abundance of raw spices.

"They have to triple our turnover by 2020. We are working for it. Major share has to come from Bio-ingredients division. Keeping this in mind, they are further investing in setting up new plants and R&D Centres. The upward trend of Ready-to-cook and Ready-to-eat products' sale shows the demand growth.

The group's turnover in the fiscal ending Mar 31, 2013 was Rs 960 crore, with Bio Ingredients division accounting for 80% of revenues from exports. They were targeting a sales turnover this fiscal was Rs 1,200 crore.

Synthite offers a wide range of essential oils catering to specific needs of Flavour and Fragrance Industries. The group accounts for 40% of the global spice Oleoresin.

From a modest beginning in 1972, when company chairman, C V Jacob came to settle in his native village here ending his two decades long career in major civil construction projects and started Synthite Industrial Chemicals, the group has six units now and 2,000 employees and is still hiring.

Later, he shifted to extraction of spice oleoresins after he got in touch with Central Food Technology Research Institute, which helped him set up the first extraction unit here. The Company was later rechristened Synthite Industries Ltd.

The group has launched EEZEE SPICE, NatXtra, Neaox and Necol brands from Bio-ingredients, which come under B2B segment. Maggie noodles, Dark Fantasy biscuits, Crax and Haldiram snacks are among those using their blends.

With growing consumer awareness on diet and health, the demand for products using natural colours will grow and there was a huge potential for its Necol natural colour brand, which the company would like to exploit.

Last year, spice powders were launched in Kerala retail market with the brand name 'Kitchen Treasures'. New products of Masala Mixes under the same brand were launched recently. Spices division had an annual sale of Rs 100 crore last year and this year was expecting a 50% growth.

Synthite has been supplying to the highly quality conscious US market for the last 40 years, besides in Europe and Asia. These markets are advanced in food processing. 'We are currently penetrating the middle-east and North African countries and the initial response is encouraging'.

The company was in the process of developing new flavours and was expecting an overall sales growth of 20% in the Indian market this year.

Synthite has also ventured into hospitality division by running an apartment hotel --Riviera Suites at Thevara waterfront and Ramada Resorts located alongside Kumbalam Lake, both in Kochi, Dr Viju Jacob, who heads the Bio-ingredients and Hospitality divisions.

### **2.3 Level and Type of Competition – Firms Operating in the Industry**

SYNTHITE INDUSTRIES LTD is an Indian oleoresin extraction firm, supplying ingredients to the major food, fragrance and flavour houses. The company is based in Kochi. In 2017, it had 35% of the world's market share. The company was established in 1972 with 20 employees. It was founded by C.V. Jacob, who started the company after working in civil construction for 2 decades. Initially it produced industrial chemicals before shifting to oleoresins. The oleoresin business was initially based on research by the Central Food Technological Research Institute in Mysore. However, the technology developed was not yet mature, and it took several years of additional research and development by synthite to make technology viable. It took another four years before they convinced food producers that they could produce quality products on time. By 2017, it has grown to 1800 crore and 2000 employees, with a 2020 goal of 3,000 crore. The company achieved this goal, with a total of 2000 employees. The company only began selling directly to consumers in its native India in 2014. Some of its major clients include Nestle, Bacardi and Pepsi. The company is currently run by the founder's son, Dr. Viju Jacob.

#### **Highlights**

- Synthite is the only company that has continuous extraction of spices.
- Synthite employs Spinning Corn Column technology for distillation of Mustard seeds.  
This is the first equipment of such a kind in India ☺

- Synthite is the only spice oleoresin processing company which has ISO and HACCP certification (from British Standard Institution)
- Synthite holds a market share of about 50% of the total Oleoresin export from India.
- Synthite has world class Quality Control and Research & Development facilities which ensure the quality of their products and facilitate the development of new products.
- Synthite is exporting every year 1750 tons of Oleoresins and Synthite's turnover in the year 2000 is about 45 million US Dollars.

Their new endeavor is to produce and market dry Vanilla, now they are in a position to offer about 5 MT of dry Vanilla with various grades. Synthite's range includes raw spices, oleoresin, essential oil, natural colors, health and food ingredients, herb extract, encapsulated and dried product, tea and coffee extract, dry fruit extracts, resinoids, seasoning, spray dried and added value product as well as application-oriented solutions. Synthite Industries Ltd, located deep inside this rural environment has contributed to the development of the area. As a result, Kadayiruppu is well connected by wide asphalted roads suitable for playing trailer-trucks carrying containers apart from telecommunication, education and medical facilities.

The company started in 1972 with an annual turnover of Rs 25 lakhs, has a combined turnover of over Rs 530 crores today. It gives direct employment to over 1200 people while another 10,000 are indirectly benefited. The leadership of Mr. C V. Jacob has steered the company to the top rung of exporters of spices oleoresins and oils, winning certificate of merits and trophies for outstanding export performance in 1976-77, 1977-78, 1983-84, and 1990-91 from the President of India, Synthite has constantly won the outstanding Exporter's Award of the Spices Board every year from 1976 till today.

## **2.5 PROSPECTS AND CHALLENGES IN INDUSTRY**

The company had come a long way since it started operations in 1983. It now produced an increasing variety of products (about 100) with varying logistical demands (e.g., short due dates, specific features, different packing) for different market segments. The growing complexity, however, made forecasting and inventory management a challenge. According to Aju Jacob, the company could not make reliable sales forecasts owing to the significant fluctuation of demand.

The company had great difficulty meeting customer demand for a one-week lead-time. Production lead times were high, ranging from two to four weeks for some products

To supply customer orders quickly, the company stocked some of the high-volume products as FG. For the year 2010 and part of 2011, the average monthly FG stock was about 34 MT (Exhibits 3 and 4). Despite having many days of FG inventory (Exhibit 12), the company rarely seemed to have the right product in stock at the right time. Even when the ordered product was in stock, often it either required new packaging or had to be reblended because the product had undergone sedimentation and hardening due to the long time in stock. For blending the product had to be manually transferred and reprocessed in a mixing kettle to bring it into a shippable state.

SFG inventory was also high at Synthite. For the year 2010 and first three months of 2011, the average monthly SFG stock was about 11 MT (Exhibits 3 & 4). This inventory was stored in barrels.

The manual material transfers were frequent at Synthite – loading SFG from barrel into mixing kettle, reloading FG into mixing kettle for reprocessing and daily transfer of de-oiled cake from distillation to extraction plant. These material transfers were an operational nightmare that resulted in loss of material and capacity and extra costs of re-processing and retesting.

Another bottleneck was the changeovers. The entire production line required cleaning when changing over from black pepper oleoresin to manufacture of variants like non-additive, decolorized and white pepper oleoresin. This meant the line was down for some time and

incurred extra cost. In the years FY10 and FY11, the variants formed 12% of the number of orders and 3% by product volume.

## **2.6 KEY DRIVERS OF THE INDUSTRY**

Under the stewardship of board of directors, headed by Mr. C. V. Jacob (Chairman & Managing Directors), Synthite has grown as an ingredient industry major in the global market. The Board of Directors includes five directors. The Directors looks after the operations and functions of different departments of Synthite Group.

Chairman M.D – Mr. C. V. Jacob

Directors – Mr. George Paul

– Mr. Ninan Philp

– Mr. Dr. Varghese Jacob

– Mr. Aju Jacob

### **Vision**

“By consistently delivering the ingredients of success for the most exciting food, health and fragrance solutions, we will be the partner of choice to our clients worldwide.”

### **Mission**

- ▶ Sustainable Growth: Grow smart, grow fast, and grow together. Innovation: Operational excellence powered by innovation.
- ▶ Customer Service: Cultivate customers, care more. Enhance Value: For all stakeholders.
- ▶ Making it a great place to work: Winning people through collaboration

### **Values**

Values are the bedrock of an organization. They form the basis of the behaviour of its members. At Synthite, the company strives to find the perfect balance between individual and organizational values. As an organization, Synthite has always insisted on a strong sense of business ethics and moral values. And it is this value system that defines the way its function, as an organization and as a family.

**CHAPTER 3**  
**REVIEW OF LITERATURE**

### **3.1 Brief Theoretical Construct Related Problem**

#### **STUDIES OF WORKING CAPITAL MANAGEMENT**

Every business whether big, medium or small, needs finance to carry on its operations and to achieve its target. Without adequate finance, no enterprise can possibly accomplish its objectives. Working capital management that is necessary to carry out the day-today operations. The term working capital refers to that part of firm's capital which is required for financing short term or current assets such as cash, marketable securities, debtors and inventories funds invested in current assets keep revolving fast and are being constantly converted in to cash and this cash flows out again in exchange for other current assets. Hence it is known as revolving or circulating capital. On the whole, Working Capital Management performs a key function and is of top priority for every finance manager. All managers must, however, keep in mind that their pursuit to liquidity; they should not lose sight of their basic goal of profitability. They should be able to attain a judicious mix of liquidity and profitability while managing their working capital.

In our present-day economy, finance is defined as the provision of money at time when it is required. Every business whether big, medium or small, needs finance to carry on its operations and to achieve its target. In fact, finance is so indispensable today that its rightly said to be the lifeblood of an enterprise. Without adequate finance, no enterprise can possibly accomplish its objectives.

A firm is required to maintain a balance between liquidity and profitability while conducting its day-to-day operations. liquidity is a precondition to ensure that the firm are able to meet its short-term obligations and its continued flow can be guaranteed from a profitable venture. The importance of cash as an indicator of continuing financial health should not be surprising in view of its crucial role within the business. This requires that business must be run both efficiently and profitably. In the process, an asset-liability mismatch may occur which may increase firm's profitability in the short run but at a risk of its insolvency. On the other hand, too much focus on liquidity will be at the expense of profitability. Thus, the manager of a

business entity is in a dilemma of achieving desired trade-off between liquidity and profitability in order to maximize the value of a firm.

The ratio analysis is the most powerful tool of financial statements analysis. Ratios simply mean one number expressed in terms of another. A ratio is a statistical yardstick by means of which relationship between two or various figures can be compared or measured. Ratios show how one number is related to another. The term “accounting ratios” is used to describe significant relationship between figures shown on a balance sheet, in a profit and loss account, in a budgetary control system or in any other part of accounting organizations. Accounting ratios thus shows the relationship between accounting data.

Working capital management deals with the most dynamic fields in finance, which needs constant interaction between finance and other functional managers. In recent times a few case studies regarding management of working capital in selected companies have been in order to make in-depth analysis of the several experts of working capital management, The finding of such studies not only throws new lights on the technical loopholes of management activities of the concerned companies, but also helps the scholars and researchers to develop new ideas, techniques and methods for effective management of working capital.

### **3.2 AN OVERVIEW OF EARLIER STUDIES**

**Natarajan Sundar (1980)** is of the opinion that working capital is important at both, the national and the corporate level. Control on working capital at the national level is exercised primarily through credit controls. The Tandon Study Group has provided a comprehensive operational framework for the same. In operational terms, efficient working capital consists of determining the optimum level of working capital, financing it imaginatively and exercising control over it. He concludes that at the corporate level investment in working capital is as important as investment in fixed assets. And especially for a company which is not growing, survival will be possible only so long as it can match increase in operational cost with improved operational efficiency, one of the most important aspects of which is management of working capital.

**Zaman M. (1991)** studies the working capital management practices of Public-sector Jute Enterprises in Bangladesh which have been found to be seriously affected. This has been attributed to several factors like low demand for jute goods and serious competition in the international market, insufficient inventory management policy, poor collection policy and inefficient cash policy. The author has formulated a long term flexible and operational working capital management model. In conclusion he has suggested the model which would certainly help 28 improve the working capital management practices of the jute industry in particular and other public enterprises as well in Bangladesh.

**Hamlin Alan P. and Heath field David F. (1991)** opine that working capital is necessary input to the production process and yet is ignored in most economic models of production. The implications of modelling the time dimension of production, and hence, the working capital requirements of firms are explored, with the particular stress placed on the competitive advantage gained by firms that retained flexibility in the time structure of their production. In this article they have attempted to explore only this most basic role of time in the production process and so focus is on the implications of explicitly recognizing the need for working capital.

**Fazzari Steven M. and Petersen Bruce C. (1993)** throws light on new tests for finance constraints on investment by emphasizing the often-neglected role of working capital as both a use and a source of funds. The authors believe that working capital is also a source of liquidity that should be used to smooth fixed investment relative to cash-flow shocks if firms face finance constraints. They have found that working capital investment is “excessively sensitive” to cash flow fluctuations. Besides, when working capital investment is included in affixed investment regression as a use or source of funds, it has a negative coefficient. They conclude that controlling for the smoothing role of working capital results in a much larger estimate of the long-run impact of finance constraints than reported in other studies.

**Hossain SaiyedZabid and Akon Md. Habibur Rahman (1997)** emphasize the basic objective of working capital management i.e., to arrange the needed working capital funds at the right time, at right cost and from right source with a 29 view to achieving a trade-off between liquidity and profitability. The analysis reveals that BTMC had followed an aggressive working capital financing policy taking the risk of liquidity. There was uninterrupted increasing

trend in negative net working capital throughout the period of the study which suggested that had exploited the entire short-term sources available to it without considering the actual needs.

### **3.3 Uniqueness of Study**

Working Capital Management is an important aspect which influences the long-term stability, profitability and liquidity of an organization. It is a process of managing short term assets and liabilities. It makes sure that a firm has sufficient liquidity to run its operations smoothly. This study helps to understand the management of working capital of Synthite Industries and the company also utilizes the working capital effectively. 4 Ratio analysis describes the significant relationship which exists between various items of a balance sheet and profit and loss account of a company. In assessing the significance of various financial data, experts engage in ratio analyses, the process of determining and evaluating financial ratios. It is possible to assess the profitability, solvency, and efficiency of an enterprise through the technique of ratio analysis.

**CHAPTER 4**  
**METHODOLOGY OF STUDY**

## **4.1 RESEARCH APPROACH AND DESIGN**

Research is being conducted to study the working capital management of the company. Research helps in drawing conclusions and in effective decision making. The research used for the study is descriptive research. The major purpose of descriptive research is description of the state of affairs as all exists at present. This research is done by a desktop analysis, and it involve scanning and absorbing tools and ideas from the websites, standard texts, journals and other related materials to get a hold on the theories of working capital.

### **4.2 SOURCES OF ONLINE DATA**

This study only uses secondary data

#### **Secondary Data**

The secondary data are those, which have already been collected by someone other than the user. Secondary sources are any published or unpublished sources which are referred by the researcher. Secondary data emphasize collected from some purpose other than one confronting the researcher at a given point of time.

The secondary data were collected from: -

- Company Website
- Annual Report (2020-2021)
- Internal publications

### **4.3 SAMPLING DESIGNING**

There has been no sampling plan as such as the study involved understanding the various process and analysing them. The study involves the detailed analysis of secondary data calculated from various sources and therefore no sample size and plan has been considered.

## **4.4 DATA ANALYSES TOOLS**

The tools and methods generally used in this study for analyzing financial statements are the following.

- Ratio Analysis
- Comparative Statement Analysis
- Trend Analysis

### **Ratio Analysis**

Ratio analysis was the first financial tool developed to analyze and interpret the financial statement and is still used widely for this purpose. Ratio analysis is defined as the systematic use of accounting ratios in order to evaluate the operating performance of the firm.

#### Liquidity Ratios

"Liquidity" refers to the ability of the firm to meet its current liabilities. The liquidity ratios, therefore, are also called 'Short-term Solvency Ratios.' These ratios are used to assess the short-term financial position of the concern. They indicate the firm's ability to meet its current obligations out of current resources.

- 1) Measures ability of a company to meet its current obligations.
- 2) Indicates short term financial stability of a company.
- 3) Indicates present cash solvency and ability to remain solvent in times of adversities.

To measure the liquidity of a firm the following ratios can be calculated

- Current ratio

- Quick (or) Acid-test (or) Liquid ratio
- Absolute quick ratio

### Profitability Ratios

The primary objectives of business undertaking are to earn profits. Because profit is the engine, that drives the business enterprise. It measures the overall efficiency of the business. It indicates whether utilization of business assets and funds are done efficiently and best way or not, so as to generate adequate profits or returns. Profitability ratios include,

- Net profit ratio
- Gross profit ratio
- Operating profit ratio
- Return on total asset

### Activity Ratios

These ratios are calculated on the basis of 'cost of sales' or „sales“; therefore, these ratios are also called as 'Turnover Ratios'. Turnover indicates the speed or number of times the capital employed has been rotated in the process of doing business. In other words, these ratios indicate how efficiently the capital is being used to obtain sales; how efficiently the fixed assets are being used to obtain sales; and how efficiently the working capital and stock is being used to obtain sales. Higher turnover ratios indicate the better use of capital or resources and in turn lead to higher profitability.

Activity ratios or Efficiency ratios include,

- Inventory turnover ratio
- Fixed asset turnover ratio
- Current asset turnover ratio
- Working capital ratio
- Total asset turnover ratio

## Solvency Ratios

These ratios are calculated to assess the ability of the firms to meet its long-term liabilities as and when they become due. Long term creditors including debenture holders are primarily interested to know whether the company has ability to pay regularly interest due to them and to repay the principal amount when it becomes due. Solvency ratios disclose the firm's ability to meet the interest costs regularly and long-term indebtedness at maturity.

Solvency ratios include the following ratios

- Debt equity ratio
- Proprietary ratio
- Ratio of long term debt to shareholders fund
- Fixed asset to net worth ratio

## Comparative Statement Analysis

Comparative balance sheet as on two or more different dates can be used for comparing assets and liabilities and findings out any increase or decrease in the items. Thus while in single balance sheet the emphasis is on present position, it is on change in the comparative balance sheet.

## Trend Analysis

A trend analysis is an aspect of technical analysis that tries to predict the future movement of a stock based on past data. Trend analysis is based on the idea that what has happened in the past gives traders an idea of what will happen in the future. There are three main types of trends: short-, intermediate- and long-term. A trend is the general direction the market is taking during a specified period of time. Trends can be both upward and downward, relating to bullish and bearish markets, respectively. While there is no specified minimum amount of time required for a direction to be considered a trend, the longer the direction is maintained, the more notable the trend.

Trend analysis is the process of trying to look at current trends in order to predict future ones and is considered a form of comparative analysis. This can include attempting to determine whether a current market trend, such as gains in a particular market sector, is likely to continue, as well as whether a trend in one market area could result in a trend in another. Though an analysis may involve a large amount of data, there is no guarantee that the results will be correct.

#### **4.5 REPORT STURCTURE**

Chapter 1 - Introduction

Chapter 2 - Industry Profile

Chapter 3 - Review of Literature

Chapter 4 - Methodology of Study

Chapter 5 - Data Analysis, Interpretation and Inferences

Chapter 6 - Findings of the Study

Chapter 7 – Conclusion

#### **4.6 LIMITATIONS OF THE STUDY**

- False accounting data gives false ratios

Accounting ratios are calculated on the basis of given data given in profit and loss account and balance sheet. Therefore, they will be only as correct as the accounting data on which they are based.

- Lack of proper standards

Circumstances differ from firm to firm hence no single standard ratio can be fixed for all the firms against which the actual ratio may be compared.

- Ratios alone are not adequate for proper conclusions

Ratios derived from analysis of statements are not sure indicators of good or bad financial position and profitability of a firm. They merely indicate the probability of favourable or unfavourable position. The analyst has to carry out further investigations and exercise his judgment in arriving at a correct diagnosis.

## **Chapter 5**

### **Data Analysis, Interpretation and Inference**

## **MEANING OF WORKING CAPITAL**

Working capital is the amount of capital that a business has available to meet the day-to-day cash requirement of its operation. Working capital means the funds (i.e.; capital) available and used for day-to-day operations (i.e.; working) of an enterprise. It consists broadly of that portion of asset of a business which are used in or related to its current operation. It refers to funds which are used during an accounting period to generate a current income of a type which consist with major purpose of a firm existence. Working capital is the difference between resource in cash or readily convertible into cash (current asset) an organizational commitment for which cash will be soon required (current liabilities).

## **CONCEPT OF WORKING CAPITAL**

There are two concepts of working capital.

- ✓ Gross working capital concept
- ✓ Net working capital concept

### ➤ Gross Working Capital Concept

The Gross working capital concept is the capital invested in the total current assets of the enterprise. Current assets are those assets which can be converted into cash within short period normally one accounting year. The Gross working capital concept is financial or going concern concept.

Gross working capital = Total current assets

### **Constituents of Current Assets**

- Cash in hand and cash at bank
- Bills receivables
- Sundry debtors
- Inventories of stock as

- Raw materials
- Work in progress
- Stores and spares
- Finished goods
- Temporary invested of surplus fund
- Prepaid expenses
- Accrued incomes
- Marketable securities

This concept is also useful in determining the rate of return on investment in working capital. It enables the enterprise to provide current amount of the working capital at right time.

#### ➤ Net Working Capital Concept

Net working capital concept is the difference between current assets and current liabilities. An analysis of the net working capital will be very helpful for knowing the operational efficiencies of the company. Net working capital can be positive or negative.

Net working capital = Current assets – Current liabilities

Constituents of current liabilities

- Accrued or outstanding expense
- Short term loans
- Dividends payable
- Bank overdraft
- Provision of taxation, if it does not amount to appropriations of profit.
- Bills payable
- Sundry creditors

## **OBJECTIVES OF WORKING CAPITAL MANAGEMENT**

- To minimize the amount of capital employed in financing the current assets, this will also lead to an improvement in return on capital employed.
- To manage the current assets in such a way that the marginal return on Investment in these assets is not less than the cost of capital acquired to finance them. This will ensure the maximum of the value of business unit.
- To maintain a proper balance between the amount of current assets and the current liabilities in such a way that a firm is always able to meet its financial obligation whenever due. This will ensure the smooth working of the unit without any production held ups due to paucity of funds.

## **CLASSIFICATION OF WORKING CAPITAL**

Working capital may be classified into ways

- On the basis of concept
- On the basis of time

On the basis of concept working capital can be classified as gross working Capital and net working capital. On the basis of time, working capital may be classified as:

- Permanent or fixed working capital
- Temporary or variable working capital

### **Permanent or Fixed Working Capital**

Permanent or fixed working capital is minimum amount which is required to ensure effective utilization of fixed facilities and for maintaining the circulation of current assets. Every firm has to maintain a minimum level of raw material, work in process, finished goods and cash

balance. This minimum level of current assets is called permanent or fixed working capital as this part of working is permanently blocked-in current assets. As the business grows the requirements of working capital also increase due to increase in current assets.

### **Characteristics of permanent working capital**

- It is classified on the basis of the time period.
- It constantly changes from one asset to another and continues to remain in the business process.
- Its size increases with the growth of business operations.

**Temporary or Variable Working Capital** Temporary or variable working capital is the amount of working capital which is required to meet the seasonal demands and some special exigencies. Variable working capital can further be classified as seasonal working capital and special working capital.

The capital required to meet the seasonal need of the enterprise is called seasonal working capital. Special working capital is that part of working capital which is required to meet special exigencies such as launching of extensive marketing for conducting research, etc. Temporary working capital differs from permanent working capital in the sense that it is required for short period and cannot be permanently employed gainfully in business.

### **Characteristics of temporary working capital**

- It is not always gainfully employed, though it may change from one asset to another asset, as permanent working capital does.
- It is particularly suited to business of a seasonal or cyclical nature.

## **NEEDS OR OBJECTS OF WORKING CAPITAL**

Every business needs some amount of working capital. The need for working capital arises due to the time gap between production and realization of cash from sales. There is an operating cycle involved in the sale and realization of cash. There are time gaps in purchase of raw material and productions; and sales; and realization of cash. Thus, working capital is needed for the following purpose:

- For the purchase of raw materials, components and spares.
- To pay wages and salaries.
- To increase day to day expenses and overhead cost such as fuel, power, office expense etc.
- To meet the selling cost as packing, advertising etc.
- To provide credit facilities to the customer.
- To maintain the inventories of the raw material, working in progress, stores and spares and finished stock.

For studying the need of working capital in a business, one has to study the business under varying circumstances such as a new concern as a growing concern and has one which has attained maturity. A new concern requires a lot of liquid funds to meet its initial requirements such as promotion formation etc. these expenses are called preliminary expenses and are capitalized. The amount needed for working capital depends upon the size of the company and ambitions of its promoters. Greater the size of the business units, generally larger will be the requirements of working capital. The requirement of working capital goes on increasing with the growth and expansion of the business till it gains maturity. At maturity the amount of working capital required is called normal working capital. There are other factors which influenced the need of working capital in a business.

## **DETERMINANTS OF WORKING CAPITAL**

### **Nature of business:**

The working capital requirement of the firm is closely related to the nature of its business. A service firm, like an electricity undertaking or a transport corporation, which has a short-term

operating cycle and which sells pre- dominantly on cash basis, has a modest working capital requirement. On the other hand, a manufacturing concern like a machine tools unit, which has a long operating cycle and which sells largely on credit, has very substantial working capital requirements.

#### **Seasonality of operations:**

Firms, which have marked seasonality in their operations usually, have highly fluctuating working capital requirements. If the operations are smooth and even throughout the year the working capital requirement will be constant and it will not be affected by the seasonal factors.

#### **Production policy:**

A firm marked by pronounced seasonal fluctuations in its sales may pursue a production policy, which may reduce the sharp variations in working capital requirements.

#### **Market conditions:**

The market competitiveness has an important bearing on working capital need of a firm. When the competition is keen, a large inventory of finished goods is required to promptly serve customers who may not be inclined to wait because other manufactures are ready to meet there needs. In view of competitive conditions prevailing in the market the firm may have to offer liberal credit terms to the customers resulting in higher debtors.

#### **Conditions of supply:**

The time taken by a supplier, of raw materials, goods, etc, after placing an order, also determines the working capital requirements. If goods as soon as or in a short period after placing an order when the purchase will not like to maintain a high level of inventory of that

good. Business cycle fluctuations: Different phases of business cycle i.e. boom, recession, recovery etc. also effect the working capital requirement. In case of recession period there is usually dullness in business activities and there will be an opposite effect on the level of working capital requirement. There will be a fall in inventories and cash requirement etc.

**Business cycle fluctuations:**

Different phases of business cycle i.e., boom, recession, recovery etc. also effect the working capital requirement. In case of recession period there is usually dullness in business activities and there will be an opposite effect on the level of working capital requirement. There will be a fall in inventories and cash requirement etc.

**Credit Policy:** The credit policy means the totality of terms and conditions on which goods are sold and purchased. A firm has to interact with two types of credit policies at a time. Firstly, the credit policy of the supplier of raw material, goods etc. and secondly, the credit policy relating to credit which it extends to its customer. In both the cases however, the firm while deciding the credit policy has to take care of the credit policy of the market. For example, a firm might be purchasing goods and servicing on credit terms but selling goods only for cash. The working capital requirement of this firm will be lower than that of a firm, which is purchasing cash but has to sell on credit basis.

**Operating cycle:** It is the time taken from the stage when cash is put into the business up to the stage when cash is realized. Thus, the working capital requirement of the firm is determined by a host of factors. Further, the determination of working capital requirements is a whole exercise; rather a continuous review must be made in order to assess the working capital requirement in the changing situation. There are various reasons, which may require the review of the working capital.

**MANAGEMENT OF WORKING CAPITAL**

Management of working capital is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and inter relationship that exist between them.

The basic goal of working capital management is to manage the current assets and current liabilities of a firm are such a way that a satisfactory level of working capital is maintained, that is it is neither inadequate nor excessive as both the situations are bad for any firm. Working capital management policies of a firm have a great effect on its profitability, liquidity and structural health of the organization. Working capital management is three dimensional in nature

- i. It concerned with the formulations of policies with regard to profitability, liquidity and risk.
- ii. It is concerned with the decision about the composition and level of current assets.
- iii. It is concerned with the decision about the composition and level of current liabilities.

### **Analysis of working capital**

#### **1. Gross working capital**

The gross working capital concept is the capital invested in the total current assets

$$\text{Gross working capital} = \text{Total current assets}$$

Table: 5.1

YEAR	2016-17(million)	2017-18(million)	2018-19(million)	2019-20(million)	2020-21(million)
Inventories	4252.34	5942.09	6256.37	4783.39	4818.76
Current investments	93.22	479.10	404.89	894.73	338.46
41	3335.86	3277.31	4177.14	3742.03	3083.07

Cash and cash equivalents	237.33	333.89	460.38	597.31	322.34
Current Loans	691.03	1105.62	13.58	12.71	879.14
Other current assets	98.6	93.95	782.73	649.24	879.14
Total current assets	8619.67	11147.40	12276.38	10842.26	9791.86

**Interpretation:** The Company is showing a variable trend for gross working capital. In the year 2020-21 it showed an increasing trend and in the later years the company showing a downward trend.

## 2.Net Working Capital

Net working capital concept is the difference between current assets and current liabilities.

Net Working Capital = Current Asset – Current Liabilities

Table number: 5.2

YEAR	CURRENT ASSETS (million)	CURRENT LIABILITIES (million)	WORKING CAPITAL
2016-17	8619.67	4520.94	4098.73
2017-18	11147.40	6419.22	4728.18
2018-19	12276.38	5734.91	6541.47
2019-20	10875.41	4964.75	5910.66
2020-21	9791.89	4047.91	5743.98

**Interpretation:** Net working capital for 2016-17 shows a positive balance and in 2019-20 there is a small decline. This indicates current asset are not sufficient to pay off claims in the year 2018 to 2021.

## LIQUIDITY RATIO

### 1. Current Ratio

It is most widely used ratio for judging liquidity of a business which establishes the relation between current assets and current liabilities.

Current Ratio = Current Assets / Current Liabilities

Table Number: 5.3

YEAR	CURRENT ASSETS	CURRENT LIABILITIES	CURRENT RATIO
2016-17	8619675771	4520945035	1.906609
2017-18	11147402016	6419221486	1.736566
2018-19	12276380154	5734917451	2.140638
2019-20	10875416067	4964754600	2.190524
2020-21	9791890000	4047910000	2.418999

**Interpretation:** If ratios are higher than 2:1 then the current ratio is satisfactory as it denotes that for the outstanding liabilities there are sufficient matching assets to make good of those liabilities. The ideal current ratio is 2:1. The current ratio was lower in the years 2016 to 2018 but it was near 2. It was the highest in the year 2020-21. Thus, the overall liquidity is satisfactory

### 2. Quick Ratio

Quick ratio or Acid-Test Ratio = Liquid Asset / Current Liability

Table Number: 5.4

YEAR	LIQUID ASSET	CURRENT LIABILITY	QUICK RATIO
2016-17	4367331284	4520945035	0.9660217
2017-18	5205323699	6419221486	0.810896
2018-19	6020008824	5734917451	1.049711
2019-20	6092120691	4964754600	1.227073
2020-21	4973130000	4047910000	1.228567

Interpretation: The standard ratio is 1:1. If the ratios are higher it indicates that, for meeting the outstanding liabilities the liquid assets are quite sufficient. Here the quick ratio in is lower than 1 and the highest is of the year 2021. In 2020-21 the ratio is above standard so, liquidity ratio of the company is satisfactory.

### 3. Absolute Liquid Ratio

The absolute liquid ratio indicates the immediate liquidity of the firm. This ratio is calculated by dividing the total of absolute liquid assets by total amount of the current liabilities.

Absolute liquid ratio = Cash + Marketable Securities / Current liabilities

Table Number: 5.5

YEAR	CASH+MARKETABLE SECURITIES	CURRENT LIABILITIES	ABSOLUTE LIQUID RATIO
2016-17	1352351820	4520945035	0.29913
2017-18	1289809033	6419221486	0.200929
2018-19	2025850846	5734917451	0.353248
2019-20	2106851950	4964754600	0.424362
2020-21	322340000	4047910000	0.079631

**Interpretation:** The standard ratio is 0.5:1. The ratios in the above 5 years is less than 0.5, it means the company's position is not sound so that it cannot meet the current liabilities only from the liquid assets, other measures have to be taken.

### SOLVENCY RATIO

## 1. Debt- Equity Ratio

The relationship between borrowed funds and owner's capital is a popular measure of the long-term financial solvency of a firm. The ratio is computed by dividing the total debt of the firm by its net worth. The standard ratio is 2:1.

$$\text{Debt- Equity Ratio} = \text{Total debt} / \text{Shareholders Fund}$$

Table Number: 5.6

YEAR	TOTAL DEBT	SHAREHOLDERS FUND	DEBT EQUITY RATIO
2016-17	3469757549	7492467014	0.463099476
2017-18	4672786241	8507145499	0.549277809
2018-19	5093276688	9297899848	0.547895414
2019-20	6534382591	9974851697	0.655085688
2020-21	4148303875	10992189415	0.377386499

Interpretation: This ratio indicates the solvency of the firm. The ideal ratio is 2:1. Here in all years the ratios are below the standard. It reveals that the debt equity management is not efficient.

## 2. Proprietary Ratio

It relates to the shareholders fund to total assets. This ratio shows the long-term solvency of the business. It is calculated by dividing shareholders' funds by the total assets.

$$\text{Proprietary ratio} = \text{Shareholders fund} / \text{Total Asset}$$

Table Number: 5.7

YEAR	SHAREHOLDERS FUND	TOTAL ASSETS	PROPRIETARY RATIO
2016-17	7492467014	12204971504	0.613886
2017-18	8507145499	15592812311	0.545581

2018-19	9297899848	16622697069	0.559349
2019-20	10190373958	18011297605	0.565776
2020-21	11106959048	16685405490	0.665669

**Interpretation:** The standard ratio is 0.75:1. A higher ratio means that there are no outside liabilities and all the funds employed are those of shareholders. The overall proprietary ratio is not satisfactory because all the ratios are below standard.

### 3. Ratio of Long-Term Debt to Shareholders Fund

Ratio = Long Term Debt/ Shareholder's Fund

Table Number: 5.8

YEAR	LONG TERM DEBT	SHAREHOLDER'S FUND	RATIO
2016-17	572752252	7492467014	0.076443
2017-18	635107816	7868391276	0.080716
2018-19	406009182	8507145499	0.047725
2019-20	170098140	10190373958	0.016692
2020-21	202075018	11106959048	0.018193

**Interpretations:** The ratio shows the relationship between long term debt and shareholder's fund. A high ratio is not a healthy sign of financial management. In this organization the ratio is very low hence the financial management of the company is satisfactory.

### 4. Fixed assets to net worth ratio

Measure of the solvency of a firm, this ratio indicates the extent to which the owner's cash is frozen in the form of brick and mortar and machinery, and the extent to which funds are available for the firm's operations.

Fixed assets to net worth ratio = Fixed assets/ Shareholders fund.

YEAR	FIXED ASSETS	SHAREHOLDER'S FUND	FIXED ASSETS TO NET WORTH RATIO
2016-17	2518668616	7492467014	0.336160
2017-18	2738255016	7868391276	0.348006
2018-19	2592126995	8507145499	0.304699
2019-20	2992171352	10190373958	0.293627
2020-21	3017992192	11106959048	0.271720

**Interpretation:** If the Fixed assets to net worth ratio is greater than one it means that creditors funds have been used to acquire a part of fixed assets. Here the ratio shows a downward trend. So, it means that the fixed assets to net worth ratio are satisfactory.

## ACTIVITY RATIO

### 1. Inventory Turnover Ratio

Inventory Turnover ratio = COGS / Inventory

Table Number: 5.10

YEAR	COST OF GOODS SOLD	INVENTORY	INVENTORY TURNOVER RATIO
2016-17	7380947711	3777107113	1.9541271
2017-18	9678778633	5942078317	1.6288541
2018-19	10079310567	5942078317	1.6962601
2019-20	12236160379	6256371330	1.9557919
2020-21	10981382603	4783295376	2.2957776

**Interpretation:** The inventory turnover ratio is calculated by dividing cost of goods sold by the average inventory of that period. Here the highest rate comes in 2018-19. Actual ratios are high so it is satisfactory.

## 2. Fixed Asset Turnover Ratio

Fixed Asset Turnover Ratio = Net Sale / Fixed Asset

Table Number: 5.11

YEAR	NET SALES	FIXED ASSETS	FIXED-ASSET TURNOVER RATIO
2016-17	10425742225	2518668616	4.1393862
2017-18	12317187658	2738255016	4.4981886
2018-19	13183999141	2592126995	5.0861702
2019-20	15992589889	2992171352	5.3448108
2020-21	14876774498	3017992192	4.9293614

**Interpretation:** A high ratio indicates that a business is doing an effective job of generating sales with a relatively small amount of fixed assets. So here fixed asset turnover ratio of the company is satisfactory.

## 3. Current Asset Turnover Ratio

Current Asset Turnover ratio = Net Sales / Current Asset

Table Number: 5.12

YEAR	NET SALES	CURRENT ASSETS	CURRENT-ASSET TURNOVER RATIO
2016-17	10425742225	829572039	1.2637918
2017-18	12317187658	8619675771	1.4289618
2018-19	13183999141	11147402016	1.1826970
2019-20	15992589889	12276380154	1.3027121

2020-21	14876774498	10875416067	1.3676269
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**Interpretation:** This ratio shows how efficiently a company can use its assets to generate sales. Higher turnover ratios mean the company is using its assets more efficiently. Lower ratios mean that the company isn't using its assets efficiently and most likely have management or production problems. The management of the Current Asset for the past 5 years shows a positive trend and highest in 2016-17 so it is satisfactory.

#### 4. Working Capital Ratio

Working Capital Ratio = Net Sales / Net Working Capital

Table Number: 5.13

YEAR	NET SALES	NET WORKING CAPITAL	WORKING CAPITAL RATIO
2016-17	10425742225	414856473	2.513097559
2017-18	12317187658	4098730736	3.005122427
2018-19	13183999141	4728180530	2.788387427
2019-20	15992589889	6541462703	2.444803344
2020-21	14876774498	5910661467	2.516939023

**Interpretation:** A ratio less than 1 is considered risky by creditors and investors because it shows the company isn't running efficiently and can't cover its current debt properly. On the other hand, a ratio above 1 shows outsider that the company can pay all of its current liabilities and still have current assets left over or positive working capital. Here all the ratios of the past 5 years are above 1 thus showing the working capital management of the company is highly efficient and satisfactory.

#### 5. Total Asset Turnover Ratio

Total asset turnover is a financial ratio that measures the efficiency of a company's use of assets in generating the sale.

$$\text{Total Asset Turnover Ratio} = \text{Sales} / \text{Total Assets}$$

YEAR	SALES	TOTAL ASSETS	TOTAL-ASSET TURNOVER RATIO
2016-17	10425742225	12204971504	0.854220
2017-18	12317187658	15592812311	0.789927
2018-19	13183999141	16622697069	0.793132
2019-20	15992589889	18011297605	0.887919
2020-21	14876774498	16685405490	0.891604

**Interpretation:** This ratio measures how efficiently a firm uses its assets to generate sales so a higher ratio is always more favorable.

#### PROFITABILITY RATIO

##### a) Net Profit Ratio

$$\text{Net Profit Ratio} = \text{Net Profit} / \text{Net Sales} * 100$$

YEAR	NET PROFIT	NET SALES	NET PROFIT RATIO
2016-17	754672158	10425742225	0.0723854
2017-18	382139717	12317187658	0.0310249
2018-19	645093043	13183999141	0.0489397
2019-20	819616061	15992589889	0.0512497
2020-21	899944471	14876774498	0.0604932

Interpretation: Net profit ratio is a useful tool to measure the overall profitability of the business. A high ratio indicates the efficient management of the affairs of business. The Net profit ratio for all the years above is satisfactory.

b) **Gross Profit Ratio**

$$\text{Gross Profit Ratio} = \text{Gross Profit} / \text{Net Sales} * 100$$

Table Number: 5.16

YEAR	GROSS PROFIT	NET SALES	GROSS-PROFIT RATIO
2016-17	1014685136	10425742225	9.7324978
2017-18	500167458	12317187658	4.0607277
2018-19	893428353	13183999141	6.7766111
2019-20	1071514028	15992589889	6.7000656
2020-21	1325898835	14876774498	8.9125424

**Interpretation:** Gross profit is very important for any business. It should be sufficient to cover all expenses and provide for profit. Generally, a higher ratio is considered better. Thus, the overall profitability is highly satisfactory.

c) **Operating Profit Ratio**

$$\text{Operating Profit Ratio} = \text{Operating Profit} / \text{Net Sales} * 100$$

Table Number: 5.17

YEAR	OPERATING PROFIT	NET SALES	OPERATING PROFIT RATIO
2016-17	7022472566	10425742225	67.357051
2017-18	8001827798	12317187658	64.964730
2018-19	9065509826	13183999141	68.761456
2019-20	11478441238	15992589889	71.773498
2020-21	11388858908	14876774498	76.554624

**Interpretation:** The operating profit margin ratio indicates how much profit a company makes after paying for variable costs of production such as wages, raw materials etc. High operating ratio indicates the better ability to generate revenue. Here the actual ratios are high so the operating profit ratio of the firm is satisfactory.

d) Return on Total Asset

Profitability can be measured in terms of relationship between net profit and total asset. This ratio is also known as return on gross capital employed. It measures the profitability of investment. The overall profitability can be known by applying this ratio.

$$\text{Return on Total Asset} = \text{Net Profit} / \text{Total Asset} * 100$$

Table Number: 5.18

YEAR	NET PROFIT	TOTAL ASSET	RETURN ON TOTAL ASSET RATIO
2016-17	754672158	12204971504	6.183318
2017-18	382139717	15592812311	2.450743
2018-19	6450993043	16622697069	3.880796
2019-20	819616061	18011297605	4.550566
2020-21	899944471	16685405490	5.393603

**Interpretation:** From 2016-17 onwards, there is an increasing trend. Hence it shows that the company is effectively utilizing its assets to generate earnings before contractual obligations must be paid.

**Trend Analysis**

Trend analysis often refers to techniques for extracting an underlying pattern of behavior in a time series.

**a) Trend Analysis of current asset**

Table Number: 19

YEAR	CURRENT ASSETS	TREND
2016-17	8619675771	100
2017-18	11147402016	129.33
2018-19	12276380154	142.42
2019-20	10875416067	126.17
2020-21	9791890000	113.59

Interpretation: The year 2016-17 is taken as the base year. Trend analysis of current asset shows an upward trend and later it flows downward. There is a steep increase in the year 2017-18. However, the company should be able to control the rate of growth in current assets so as to avoid a situation of idle funds.

**b) Trend Analysis of current liabilities**

Table Number: 5.20

Year	CURRENT LIABILITY	TREND
2016-17	4520945035	100
2017-18	6419221486	141.99
2018-19	5734917451	126.85
2019-20	4964754600	109.82
2020-21	4047910000	89.54

Interpretation: The year 2016-17 is taken as the base year. The table shows the trend in current liabilities. There is consistent trend in the current liabilities. After increase in 2017 to 2018 there is a decrease in current liabilities. So the company is very good in managing current liabilities

**CHAPTER-6**  
**FINDINGS OF THE STUDY**

## **Findings**

- Gross working capital of the company shows a variable trend. First there is an upward trend later it becomes downward. It shows the inadequate use of current assets.
- Net working capital shows a positive balance in the year 2016 to 2019 but later there is a small decline. This indicates current assets are not sufficient to meet the working capital.
- The company was able to maintain current ratio as 2 and more which is above the standard during the years 2019 to 2021. This shows the firm has the ability to meet its current obligation. It also shows the company is efficient in liquidity management.
- The standard liquid ratio is 1:1. Here 2019 to 2021 shows the ratio that above standard. Highest liquid ratio is 1.2 in the year 2020-21. Therefore, the liquid ratio of the firm is satisfactory.
- The standard absolute liquid ratio is 0.5:1. The ratios in the last 5 years are less than 0.5. It means company is not good at keeping sufficient cash and bank balances and marketable securities.

Current ratio and Quick ratio are above standards. But absolute liquidity ratio is not up to the standard, so the company has to take necessary measures for managing cash and bank balance and marketable securities. Based on the two ratios we can understand that the liquidity position of the company is good.

- The ideal debt equity ratio is 2:1. Herein all years the ratios are below the standard. It reveals that the debt equity management is not efficient.
- The standard proprietary ratio is 0.75:1. The overall proprietary ratio is not satisfactory because all the ratios are below standard.
- A high ratio of long-term debt to shareholders fund is not a healthy sign of financial management. In this organization the ratio is very low hence the financial management of the company is satisfactory.
- If the Fixed assets to net worth ratio are greater than one it means that creditor's funds have been used to acquire a part of fixed assets. Here the ratio shows a downward trend. So it means that the fixed assets to net worth ratio are satisfactory.

Debt equity ratio and proprietary ratio are below the standard ratios so it is not satisfactory. And the ratio of long-term debt to shareholders fund and fixed assets to net worth ratios are satisfactory. Based on these ratios the solvency position of Synthite Industries is not good. They have to provide more attention to the solvency position of the company.

- The inventory turnover ratio is calculated by dividing cost of goods sold by the average inventory of that period. Actual ratios are high so it is satisfactory.
- A high fixed asset turnover ratio indicates that a business is doing an effective job of generating sales with a relatively small amount of fixed assets. Here the fixed asset turnover ratio is overall satisfactory.
- Higher current asset turnover ratios mean the company is using its assets more efficiently. Lower ratios mean that the company isn't using its assets efficiently and most likely have management or production problems. The management of the Current Asset for the past 5 years shows a positive trend and highest in 2021 so it is satisfactory.
- Working capital ratio above 1 shows outsiders that the company can pay all of its current liabilities and still have current assets left over or positive working capital. Here all the ratios of the past 5 years are above 1 thus 83 showing the management is highly efficient and satisfactory.
- Total asset turnover ratio measures how efficiently a firm uses its assets to generate sales so a higher ratio is always more favorable. From the above graph it is observed that the ratio has been increased during the last 5 years. Thus, the company uses its assets more efficiently.

Based on the efficiency ratios like inventory turnover ratio, fixed assets turnover ratio, current asset turnover ratio, working capital ratio and total assets turnover ratio, we can analyze that the company is running the business very effectively. Because all the efficiency ratios are satisfied.

- Profitability ratios like net profit ratio, gross profit ratio, operating profit ratio and return on total assets are shows a positive balance. So, all these ratios are satisfactory.

Based on these profitability ratios the profitability position of Synthite Industries is in very good position.

- Trend analysis of current assets shows an upward trend in the year 2016 to 17 and later it shows a downward trend. However, the company should be able to control the rate of growth in current assets so as to avoid a situation of idle funds.
- Trend analysis of current liabilities shows an increase in 2017 to 2019 later it decreases, so the company is very good in managing current liabilities.
- The steep increase in investment in working capital over the years is justified by somewhat similar increase in the net profit ratio of the company in the corresponding years. With growing volume there is a requirement for more efficient management of working capital. So as to have a strong liquidity position considering the fact that profitability and liquidity should go hand in hand to have a sound and strong financial position.

Overall, the company was able to raise to the expectation of its shareholders by achieving attractive profit figures building up a strong financial position seizing a reasonable market share from its competitors and achieving the wealth maximization objective of the shareholders. Hence Synthite industries have effective working capital to carry out the business.

## **CONCLUSION**

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The study was to analyze and evaluate the effectiveness of working capital management of Synthite Industries Ltd. It is an Indian oleoresin extraction firm supplying ingredients to the major food fragrance and flavour houses. The company is based in Kochi. In 2017 it had 35% of the world's market share. The company was established in 1972 with 20 employees. It was founded by C.V. Jacob who started the company after working in civil construction for 2 decades. Initially it produced industrial chemicals before shifting to oleoresins.

As per the analysis of ratios and findings we can understand that the analysis and interpretation of various data relating to working capital management helped to reach in to a conclusion that the liquidity, efficiency and profitability of the working capital is sufficient since the working capital shows a positive balance. It also reveals that the company is not having a satisfactory debt equity ratio and proprietary ratio. In order to manage debtors more efficiently establish clear credit practices as a matter of company policy and make sure that these practices are clearly understood by staff suppliers and customers.

From the recommendations from the study the company should take proper efforts to manage working capital effectively. The net working capital of the company can be seen to have been increasing at a high rate indicating increasing volume of operations of the company and thereby growth demanding higher working capital requirements. With growing volume there is a requirement for more efficient management of working capital. In order to manage debtors more efficiently establish clear credit practices as a matter of company policy and the company can improve their profitability by exploring the export markets. The overall success of any company depends upon the working capital position. So it should be handled properly because it shows the efficiency and the financial strength of the company.

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