An Internship Report on

Working Capital Management of Crystal Composite Limited

This Report is Submitted to the Faculty of Business Studies, Hajee Mohammad Danesh Science and Technology University as a Partial Requirement for the Fulfillment of Degree of Master of Business Administration (Evening) Program

SUBMITTED BY

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May, 2016

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LETTER OF TRANSMITTAL

May 09, 2016
Dr. Md. Zahangir Kabir
Associate Professor
Department of Management
Hajee Mohammad Danesh Science and Technology University, Dinajpur.

Subject: **Submission of Internship Affiliation Report.**

Dear Sir,

With immense pleasure, I am submitting my internship report of **"Working Capital Management of Crystal Composite Limited**" which was assigned me as a part of my MBA (Evening) Program. I have tried my level best to complete this report with the necessary information and suggested proposal that you were provided me as your best as well.

I hope that the report will be completed as your expectations.

Thank you

Sincerely,

_____

Mst. Musreba Khatun
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Student's Declaration

I do hereby declare that the internship report "**Working Capital Management of Crystal Composite Limited"** embodies the result of my own internship works and efforts, prepared under the supervision of Dr. Md. Zahangir Kabir, Associate Professor, Department of Management, Hajee Mohammad Danesh Science and Technology University, Dinajpur.

I further affirm that work and information reported in this internship report is original and no part or whole has been submitted to, in any form, any other University or Institution for any degree or any other purpose.

_____

Mst. Musreba Khatun
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Certificate of Supervisor

This is to certify that **Mst. Musreba Khatun,** Student ID: E130502094, MBA (Evening), Major in Accounting, Faculty of Business Studies has successfully completed MBA (Evening) Internship Program titled on "**Working Capital Management of Crystal Composite Limited"** under my Supervision and Guidance.

I also certify that I gone through the report and thoroughly found it satisfactory for submission to the Faculty as a part of partial fulfillment of MBA (Evening) degree.

Therefore, she is directed to submit her Report for Evaluation. I wish her success at every sphere of Life.

_____

Dr. Md. Zahangir Kabir
Associate Professor
Department of Management
Faculty of Business Studies
Hajee Mohammad Danesh Science and Technology University, Dinajpur.

Certificate of Co-Supervisor

This is to certify that **Mst. Musreba Khatun,** Student ID: E130502094, MBA (Evening), Major in Accounting, Faculty of Business Studies has successfully completed MBA (Evening) Internship Program titled on "**Working Capital Management of Crystal Composite Limited"** under my Supervision and Guidance.

I also certify that I gone through the report and thoroughly found it satisfactory for submission to the Faculty as a part of partial fulfillment of MBA (Evening) degree.

Therefore, she is directed to submit her Report for Evaluation. I wish her success at every sphere of Life.

_____

Sourav Paul Chowdhury
Assistant Professor
Department of Management
Faculty of Business Studies
Hajee Mohammad Danesh Science and Technology University, Dinajpur.

Crystal Composite Ltd.

A HOUSE OF QUALITY GARMENTS MANUFACTURER

To Whom It May Concern

This is to certify that, Mst.Musreba Khatun Student of MBA (Major in accounting & Information), Student ID:E130502094 of Hajee Mohammad Danesh Science and Technology University, Dinajpur, has successfully completed internship program from March 6th to 20th April 2016 at Crystal Composite Ltd.Mirpur-12.Dhaka1216.

During the period of internship he has maintained the Office discipline and a good relation with all the members of this company.

We wish him every success in life

Sultan Ahmed
Managing Director
Crystal Composite Ltd.

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DEDICATED TO
MY
BELOVED PARENTS
&
SUPERVISOR

ACKNOWLEDGEMENT

It is my great privilege to express our gratitude to our creator Allah (SWT) for such great opportunity to be in touch with Crystal Composite Limited for the 45 days. I have to put my heartened feelings and gratitude for the kindness and assistance that was provided to me to complete my assigned report on the topic **"Working Capital Management of Crystal Composite Limited"** In preparing the report. I want to express my strong gratitude to my Honorable supervisor, **Dr. Md. Zahangir Kabir,** Associate Professor, Department of Management, Hajee Mohammad Danesh Science and Technology University. I will never forget the kind cooperation which I received from my Honorable supervisor.

I express my heart full thanks to all the members of Crystal Composite Limited especially Md. Sultan Ahmed, Managing Director of Crystal Composite Limited and all other members who gave me necessary information and excellent guidance to prepare this internship report.

I would like to thank from the deep of my heart to those people who are related with making of this report and make it a success.

At last but not the least, Hajee Mohammad Danesh Science and Technology University, Dinajpur for giving me an opportunity to complete my MBA (Evening) degree and give me a scope to gather practical experience and enrich my knowledge.

May **ALLMIGHTY ALLAH** bless all of them.

ABSTRACT

Working capital management plays a significant role in better performance of business entities. Working capital management involves the management of the most liquid resources of the firm which includes cash and cash equivalents, Inventories and trade, account receivables, account payable, accrual, short term financing, cash conversion cycle, working capital policies. This study analyzes the influence of working capital management of "*Crystal Composite Limited*". It is a leading garments firm in Bangladesh. The study also concludes that "*Crystal Composite Limited*" following conservative working capital management policy and improve its working capital policy. For this purpose I have used data of "*Crystal Composite Limited*" from 2012-2015. The ratio of working capital efficiency of sales ratio in 2015, 2014, 2013, 2012 is respectively 9.89%, 3.19%, 4.51%, 1.22% and Working Capital Turnover is 10.11%, 31.41%, 22.17%, 82.10%.

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CHAPTER ONE

INTRODUCTION

Corporations which are mainly operated as manufacturing companies have a vast area of functioning departments and activities. Among the functioning department Finance is a very important functioning department which acts as the heart of it Finance division. Everyday collection, fund supervision, fund allocation and maintaining relationship with the banks, buyers are the main tasks for finance department. Moreover, a manufacturing company's main objective is to sell or export its products. Its main business concentration is in the manufacturing and distribution of its product nationwide or in global marketplace.

In this study, I've prepared my internship paper on Crystal Composite Limited which is the leading quality dyeing and garments manufacturer of Bangladesh. My report is concentrated on its working capital management.

1.1 Introduction

The business world is getting dynamic and it is impossible for a business to survive in a fast paced, uncertain world if it has not sufficient practical knowledge. Business plays and links important roles in developing the economy of a country. So, in the business world, practical experience is regarded as a media through whom we have an acquaintance with the real world.

The report is a requirement of the internship program for my MBA (Evening) program. The topic of my report has been duly approved by my internship supervisor Dr. Md. Zahangir kabir, Associate Professor, Department of Management, Hajee Mohammad Danesh Science and Technology University. During my internship I was concentrated on different function regarding the working capital management of Crystal Composite Limited which inspired me to choose this topic. The report thus was titled as "Working Capital Management of Crystal Composite Limited".

I am authorized to prepare a report on '**Working Capital Management and its profitability of** Crystal Composite Limited for the partial fulfillment of my course requirement. I am an employee of CRYSTAL WEARS LIMITED, 142, senanibas road, safura khatun super market, 4th floor,mirpur-12,Dhaka-1216 where I'm working as a

assistant accounts manager from March 01, 2015 to till date. This report has been prepared to reflect my knowledge about Working Capital Management with my practical experience on the day to day work with tracking and analyzing different components of Working Capital and their performance.

1.2 Objectives of the Study

This report has prepared to gain a clear view of the working capital position and its management process. It includes all my experience in the Finance Department of Crystal Composite Limited. I have tried to show how Crystal Composite Limited handles all the working capital activities necessary to manage cash, accounts receivables, inventories etc. I also analyze their policies regarding the components of working capital. Besides my analysis on working capital I also discussed these policies to make my report more likely and informative.

1.3 Methodology and Data Collection

Methodology refers to the essential part of the study and the process of collecting information and arranging it in terms of the relevant issues of the study. It is deigned in a way so that it correspondent to achieve the objectives of the study.

The selected years I've been studying for working capital management of Crystal Composite Limited are 2012-2015. The Study population is the set of all publicly available information regarding Crystal Composite Limited. It consists of financial statement data and internal organizational information.

Source:

Information provided on this report is of two types. One is primary source and the next one is secondary source. In fact, most of the information has collected from primary sources.

Primary Sources

1. Data from the crystal management.
2. Day-to-day conversation and discussion with the Finance Manager and Credit Manager.

Moreover, I have maintained a close contact with the General Manager – Finance and Financial Accounting of Crystal Composite Limited who regularly get updated with the working capital data to analyze the business position within current assets and liabilities.

Secondary Sources

1. Prospectus of Crystal Composite Limited 2014
2. Annual Reports – 2014 and 2015 of Crystal Composite Limited
3. Inventory Report (moving average)
4. Cash Book
5. Books of Receivables
6. Websites and so on.

Data Collection Method:

The process of financial data collection is not hassle free for any outsiders. As I working there as a running employee, they have allowed me to collect hard copy of data from responsible persons of Crystal Composite Limited . Some times, they have provided data verbally and I took note of that.

1.4 Limitations of the Study

Analyzing and evaluating the working capital management of Crystal Composite Limited is not that easy, particularly in such a short. The limitations of the study are described in below:

- Unavailability of segregated raw material consumption and accounts receivables data in recent years'
- All the employees were always busy with heavy workload. Therefore, they got few times to extend their co-operation

CHAPTER TWO

INDUSTRY AND COMPANY OVERVIEW

2.1 Garments Industry in Bangladesh:

Here, I want to share an analysis of Garment industry on the basis of Porter's Five Factors Model. According to the model focuses on five forces that shape competition within the industry. These are:

1. The threat of new entrants by potential competitors
2. The degree of rivalry among established company within industry
3. The threat of substitute products
4. The bargaining power of buyers
5. The bargaining power of Suppliers

Porter argues that the stringer these forces is, the more limited is the ability of the established companies to raise prices and earn greater profit. The impact that each of five forces has on a company is discussed in details below:

- **The threat of New entrants:**

Due to high development cost of manufacturing plant the threat of new entrants is lower in the Dyeing and garments industry.

- **The degree of rivalry among established company within industry:**

The degree of rivalry among the established competitors within the industry is very high based on the market share, distribution channel, efficient production, differentiation, brand image.

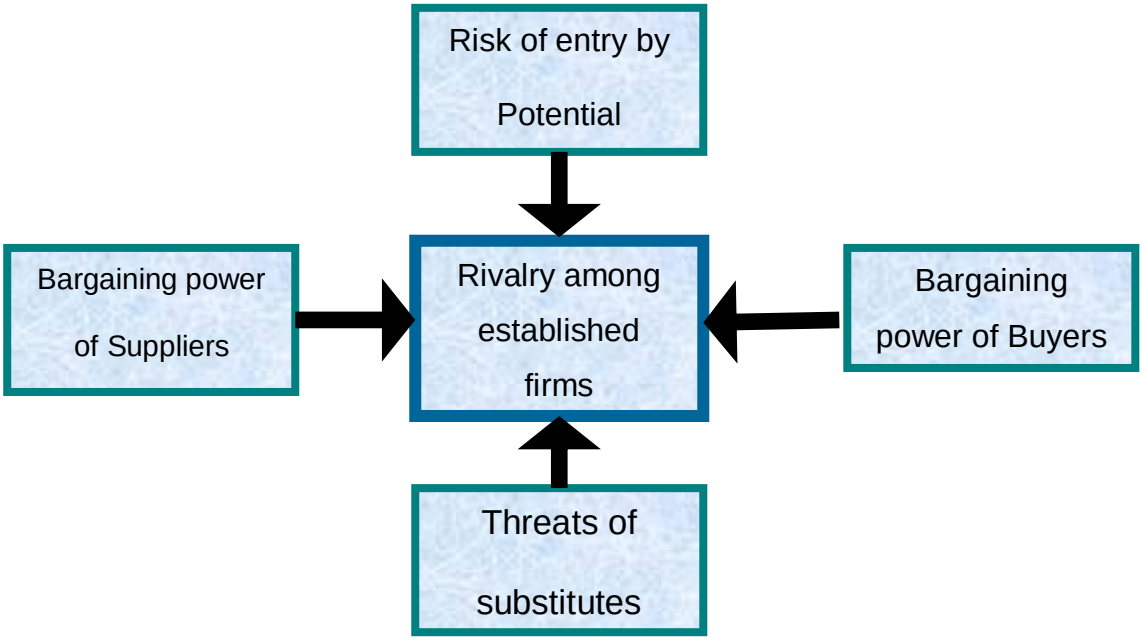
Crystal Composite Limited faces growing competition from different sectors in the dyeing and garments industry but it sustains its position strongly.

The threat of substitute products:

The threat of substitute products produced by other industry is very low because there are no perfect substitutes for the dyeing and garments industry in Bangladesh.

The bargaining power of buyers:

Buyers are offering every day low price for job order.



The bargaining power of Suppliers:

The bargaining power of the supplier is high because most of the suppliers of raw materials are local and foreign suppliers.

Form the analysis; we can say that the market is attractive as well as competitive. Marketers predicted that the dyeing and garments industry can grow at double pace in the next years. And as there is enough possibilities to grow in this dyeing industry .As Crystal Composite Limited has the strong and very efficient manufacturing plant, I believe that its market prospect is huge and profitable.

2.2 Organizational Overview: Crystal Composite Limited

2.2.1 History:

Established in 2005 in independent Bangladesh, Crystal Composite Limited is the growing dyeing and garments company right now in Bangladesh. It is the most modern

and technologically advanced company in the dyeing and garments industry. This company uses state-of-the-art brand new equipment from the world's leading suppliers to create its products and has coupled that with the highest caliber of technological support-expatriate staff to operate the machines alongside local staff trained as suppliers' plants.

The Crystal Group grew rapidly with the establishment of branches in many parts of the Dhaka city. It also merged with other leading dyeing and garments companies, such as CRYSTAL WEARS LIMITED, CRYSTAL DESIGN LIMITED, SUN FASHIION WEARS INDUSTRY LIMITED

Crystal has evolved to become the leading dyeing and garments in the industry- by providing quality Dyeing and finishing of fabrics and garments.

To give a comprehensive and sustainable fabrics dyeing and garments solution to the need of the industry. The superior quality of Crystal products has been possible because of support from its advanced plants and an international- standard of strict quality.

Investment in technology and plant capacity is even more evident from the new factory of Crystal Wears Limited at Ashulia, Savar.

2.1.2 Operation

The core business of Crystal is manufacturing and exporting dyeing of fabrics and knit garments. It produces a wide range of knit garments including T-shirt, polo shirt, short sleeve, long sleeve, nightwear, underwear of ladies, gents, and kids item.

The Dyeing and Readymade garments market in Bangladesh is highly competitive with more than 4000 companies operating in the industry. However, only fifteen of them are national players with the rest operating only on a regional basis. The dyeing industry can be divided into three segments. These are:

a. Knit
b. sweater
c. woven
d. Home
e. lingerie

The knit segment of the market accounts for a whopping 40% of the total industry, whereas sweater and woven 30%, and 30%, respectively.

Bangladesh being a developing country, the garments industry is growing at the rate of 8%-9% per year. The development projects and opportunities for new investments in the country present a good prospect for the growth of the garments industry.

The major focus of the companies, operating in the industry, is towards knit and sweater segment. Woven segment also very rising segment.

The fierce competition has also made the industry highly price competitive. Most of the competitors consider pricing as one of the major marketing tools.

The decorative segment of the industry is trade driven, where trade relation plays a vital role for the success of any company. Strong manufacturing equipments, tools, technology and technical sound personnel.

The industrial segment of the industry mostly depends on foreign export. Industrial garments paints are mostly used for protection of any installation or equipment from various hazardous effects.

With the development of the economy and its burgeoning population, the Bangladesh garments market presents a threshold of opportunity and great potential. As the market has huge growth prospects, other multinational companies may wish to venture into the Bangladesh market and competition may get fiercer, in future.

2.1.3 Mission and Vision

The mission of Crystal in Bangladesh is the following:

To increase the turnover by 100% in the next five years

The vision of Crystal is the following-

We shall remain as the benchmark in the garments industry by:

- ✓ Being an innovative and technology driven company
- ✓ Consistently delivering world class products
- ✓ Ensuring best consumer satisfaction through continuous value added services provided by highly professional and committed team

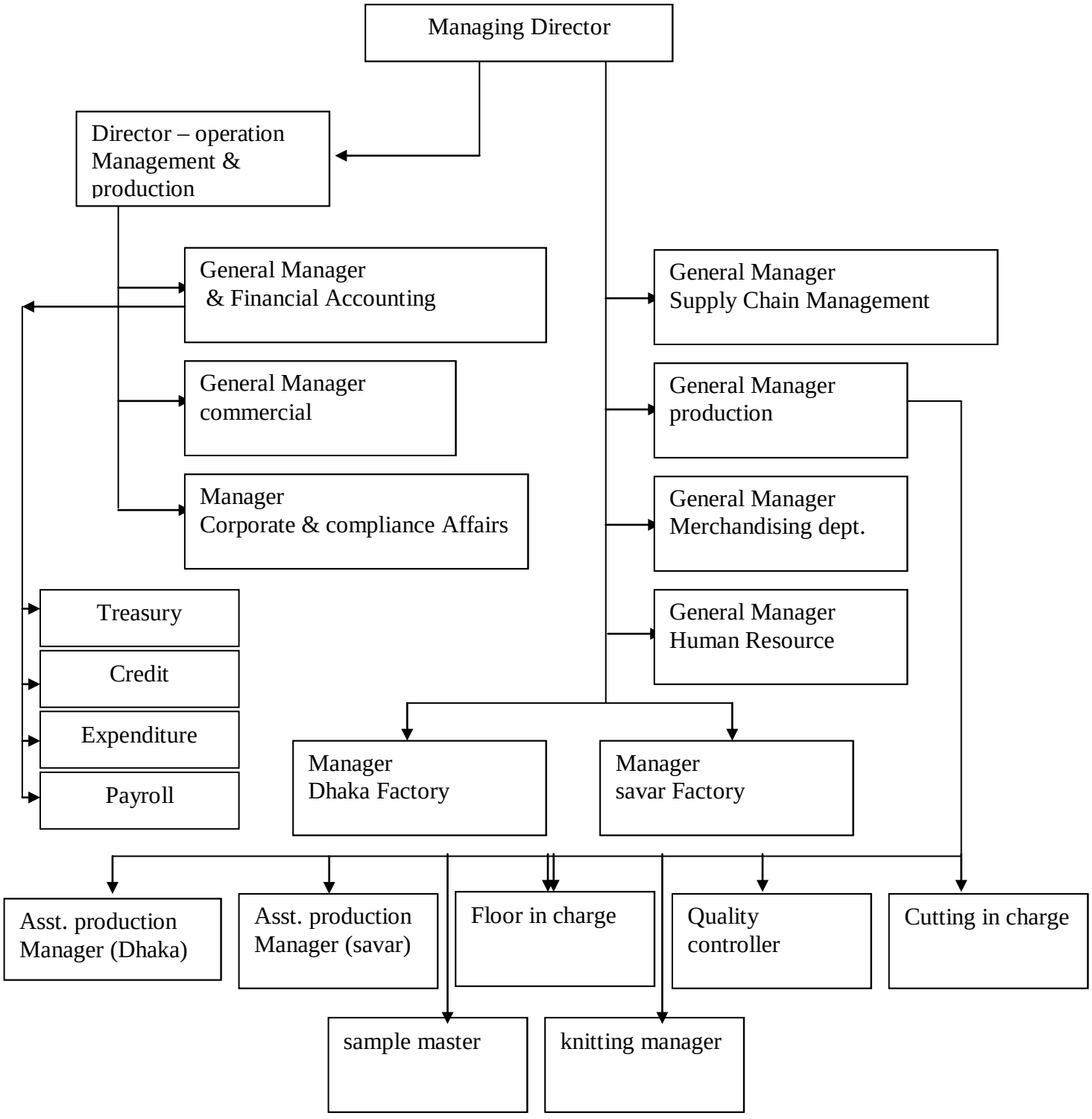
2.1.4 Objectives

Crystal Composite Limited focuses on the following things:

- ✓ Commitment to achieving total foreign buyer satisfaction.
- ✓ Commitment to completion of foreign orders of the company as an ethical and socially responsible one.
- ✓ Commitment to continue to hold a strong position in the market through consistent export growth, increasing productivity and developing techniques to meet buyers needs.
- ✓ Ensuring continuous improvement in the operations through utilization of the highly professional and dedicated team, proper process management and participation of the stakeholders.
- ✓ Setting measurable targets at appropriate stages and continuously monitoring them.

2.1.5 Organizational Hierarchy:

Management of crystal composite ltd. is skilled and average in their business. Executives in the top level management believe in collective team efforts, which are reflected in the organogram and day to day operation. Senior management officials meet from time to time to discuss the business of the company and events



2.1.6 Products

The product range includes specialized schemes and Polo Shirt, T-Shirt, Trouser, Jurssy and Night Dress in each of these product categories, Crystal has been the pioneer. Crystal also provides customer support connecting consumers to technology through specialized services like free technical advice on surface preparation. To bolster customer satisfaction, Crystal has recently launched Home Decor Service from which once can get an array of services pertaining to painting.

Production of composite and coatings is the core business of Crystal Composite Limited. The main products of the Company are:

- T-Shirt
- Polo Shirt
- Tank Top
- Jacket
- Paijama
- Pant
- Vest

CHAPTER THREE

LITERATURE REVIEW

3.1 Working Capital

Working capital management is the functional area of finance that covers all the current accounts of the firm. It is concerned with the adequacy of current assets as well as the level of risk posed by current liabilities. Decisions relating to working capital and short term financing are referred to as working capital management. These involve managing the relationship between a firm's short-term assets and its short-term liabilities. The goal of Working capital management is to ensure that the firm is able to continue its operations and that it has sufficient cash flow to satisfy both maturing short-term debt and upcoming operational expenses.

By definition, Working capital management entails short term decisions - generally, relating to the next one year period - which is "reversible". These decisions are therefore not taken on the same basis as Capital Investment Decisions (NPV or related, as above) rather they will be based on cash flows and / or profitability.

- One measure of cash flow is provided by the cash conversion cycle - the net number of days from the outlay of cash for raw material to receiving payment from the customer. As a management tool, this metric makes explicit the inter-relatedness of decisions relating to inventories, accounts receivable and payable, and cash. Because this number effectively corresponds to the time that the firm's cash is tied up in operations and unavailable for other activities, management generally aims at a low net count.

- In this context, the most useful measure of profitability is Return on capital (ROC). The result is shown as a percentage, determined by dividing relevant income for the 12 months by capital employed; Return on equity (ROE) shows this result for the firm's shareholders. Firm value is enhanced when, and if, the return on capital, which results from working capital management, exceeds the cost of capital, which results from capital investment decisions as above. ROC measures are therefore useful as a management tool, in that they link short-term policy with long-term decision making. See Economic value added (EVA).

Working capital (also known as *net working capital*) is a financial metric which represents the amount of day-by-day operating liquidity available to a business. Along with fixed assets such as plant and equipment, working capital is considered a part of operating capital. It is calculated as current assets minus current liabilities. A company can be endowed with assets and profitability, but short of liquidity, if these assets cannot readily be converted into cash.

Current assets and current liabilities include three accounts which are of special importance. These accounts represent the areas of the business where managers have the most direct impact:

- accounts receivable (current asset)
- inventory (current assets), and
- accounts payable (current liability)

In a situation where a company carries more cash than the minimum amount needed to maintain operations, the excess portion is usually excluded from working capital.

In addition, the current (payable within 12 months) portion of debt is critical, because it represents a short-term claim to current assets. Common types of short-term debt are bank loans and lines of credit.

An increase in working capital indicates that the business has either increased current assets (that is received cash, or other current assets) or has decreased current liabilities, for example has paid off some short-term creditors.

3.2 Management of Working Capital

Guided by the above criteria, management will use a combination of policies and techniques for the management of working capital. These policies aim at managing the *current assets* (generally cash and cash equivalents, inventories and debtors) and the short term financing, such that cash flows and returns are acceptable.

- **Cash management**. Identify the cash balance which allows for the business to meet day to day expenses, but reduces cash holding costs.

- **Inventory management**. Identify the level of inventory which allows for uninterrupted production but reduces the investment in raw materials - and minimizes reordering costs - and hence increases cash flow; see Supply chain management; Just In Time (JIT); Economic order quantity (EOQ); Economic production quantity (EPQ).

- **Debtors' management**. Identify the appropriate credit policy, i.e. credit terms which will attract customers, such that any impact on cash flows and the cash conversion cycle will be offset by increased revenue and hence Return on Capital (or *vice versa*); see Discounts and allowances.

- **Short term financing**. Identify the appropriate source of financing, given the cash conversion cycle: the inventory is ideally financed by credit granted by the supplier; however, it may be necessary to utilize a bank loan (or overdraft), or to "convert debtors to cash" through "factoring".

3.3 Cash

Cash usually refers to money in the form of currency, such as banknotes and coins. In bookkeeping and finance, "cash" refers to current assets comprised of currency or currency equivalents that can be accessed immediately or near-immediately (as in the case of money market accounts).

Why Firms Hold Cash

The finance profession recognizes the three primary reasons offered by economist John Maynard Keynes to explain why firms hold cash. The three reasons are for the purpose of speculation, for the purpose of precaution, and for the purpose of making transactions. All three of these reasons stem from the need for companies to possess liquidity.

Speculation

Economist Keynes described this reason for holding cash as creating the ability for a firm to take advantage of special opportunities that if acted upon quickly will favor the firm. An example of this would be purchasing extra inventory at a discount that is greater than the carrying costs of holding the inventory.

Precaution

Holding cash as a precaution serves as an emergency fund for a firm. If expected cash inflows are not received as expected cash held on a precautionary basis could be used to satisfy short-term obligations that the cash inflow may have been bench marked for.

Transaction

Firms are in existence to create products or provide services. The providing of services and creating of products results in the need for cash inflows and outflows. Firms hold cash in order to satisfy the cash inflow and cash outflow needs that they have.

Ways to Manage Cash

Firms can manage cash in virtually all areas of operations that involve the use of cash. The goal is to receive cash as soon as possible while at the same time waiting to pay out cash as long as possible. Below are several examples of how firms are able to do this.

Policy for Cash Being Held

Here a firm already is holding the cash so the goal is to maximize the benefits from holding it and wait to pay out the cash being held until the last possible moment. Previously there was a discussion on Float which includes an example based on a checking account. That example is expanded here.

Assume that rather than investing $500 in a checking account that does not pay any interest, you invest that $500 in liquid investments. Further assume that the bank believes you to be a low credit risk and allows you to maintain a balance of $0 in your checking account.

This allows you to write a $100 check to the water company and then transfer funds from your investment to the checking account in a "just in time" (JIT) fashion. By employing this JIT system you are able to draw interest on the entire $500 up until you need the $100 to pay the water company. Firms often have policies similar to this one to allow them to maximize idle cash.

Export and Local Sales

The goal for cash management here is to shorten the amount of time before the cash is received. Firms that make sales on credit are able to decrease the amount of time that their customers wait until they pay the firm by offering discounts.

For example, credit sales are often made with terms such as 3/10 net 60. The first part of the sales term "3/10" means that if the customer pays for the sale within 10 days they will receive a 3% discount on the sale. The remainder of the sales term, "net 60," means that the bill is due within 60 days. By offering an inducement, the 3% discount in this case, firms are able to cause their customers to pay off their bills early. This results in the firm receiving the cash earlier.

Inventory

The goal here is to put off the payment of cash for as long as possible and to manage the cash being held. By using a JIT inventory system, a firm is able to avoid paying for the inventory until it is needed while also avoiding carrying costs on the inventory. JIT is a system where raw materials are purchased and received just in time, as they are needed in the production lines of a firm.

Cash Management

In United States banking, cash management, or treasury management, is a marketing term for certain services offered primarily to larger business customers. It may be used to describe all bank accounts (such as checking accounts) provided to businesses of a certain size, but it is more often used to describe specific services such as *cash concentration*, *zero balance accounting*, and *automated clearing house* facilities. Sometimes private bank customers are given cash management services.

Cash Management Services Generally offered

The following is a list of services generally offered by banks and utilised by larger businesses and corporations:

- **Account Reconcilement Services**: Balancing a checkbook can be a difficult process for a very large business, since it issues so many checks it can take a lot of human monitoring to understand which checks have not cleared and therefore

what the company's true balance is. To get around this, banks have developed a system which allows companies to upload a list of all the checks that they issue on a daily basis, so that at the end of the month the bank statement will show not only which checks have cleared, but also which have not. More recently, banks have used this system to prevent checks from being fraudulently cashed if they are not on the list, a process known as *positive pay*.

- **Advanced Web Services**: Most banks have an Internet-based system which is more advanced than the one available to consumers. This enables managers to create and authorize special internal logon credentials, allowing employees to send wires and access other cash management features normally not found on the consumer web site.

- **Armored Car Services**: Large retailers who collect a great deal of cash may have the bank pick this cash up via an armored car company, instead of employees depositing the cash.

- **Automated Clearing House**: services are usually offered by the cash management division of a bank. The Automated Clearing House is an electronic system used to transfer funds between banks. Companies use this Certain companies also use it to collect funds from customers (this is generally how automatic payment plans work). This system is the subject of the ire of some consumer groups, because under this system all banks assume that the company initiating the debit is correct until proven otherwise.

- **Balance Reporting Services**: Corporate clients who actively manage their cash balances usually subscribe to secure web-based reporting of their account and transaction information at their lead bank. These sophisticated compilations of banking activity may include balances in foreign currencies, as well as those at other banks. They include information on cash postitions as well as 'float' (e.g., checks in the process of collection). Finally, they offer transaction-specific details on all forms of payment activity, including deposits, checks, wire transfers, ACH (automated clearinghouse debits and credits), investments, etc.

- **Cash Concentration Services**: Large or national chain retailers often are in areas where their primary bank does not have branches. Therefore, they open bank

accounts at various local banks in the area. To prevent funds in these accounts from being idle and not earning sufficient interest, many of these companies have an agreement set with their primary bank, whereby their primary bank uses the Automated Clearing House to electronically "pull" the money from these banks into a single interest-bearing bank account.

- **Positive Pay**: Positive pay is a service whereby the company electronically shares its check register of all written checks with the bank. The bank therefore will only pay checks listed in that register, with exactly the same specifications as listed in the register (amount, payee, serial number, etc.). This system dramatically reduces check fraud.

- **Sweep Accounts**: are typically offered by the cash management division of a bank. Under this system, excess funds from a company's bank accounts are automatically moved into a money market mutual fund overnight, and then moved back the next morning. This allows them to earn interest overnight. This is the primary use of money market mutual funds.

- **Zero Balance Accounting**: can be thought of as somewhat of a *hack*. Companies with large numbers of stores or locations can very often be confused if all those stores are depositing into a single bank account. Traditionally, it would be impossible to know which deposits were from which stores, without seeking to view images of those deposits. To help this problem, banks developed a system where each store is given their own bank account, but all the money deposited into the store account is automatically moved into the company's main bank account. This allows the company to look at individual statements for each store. US Banks at the present time, however, are almost all converting their systems so that companies **can** tell which store made a particular deposit, even if these deposits are all being done into one account. Therefore, zero balance accounting is being used less frequently.

- **Wire Transfer**: A wire transfer is an electronic transfer of funds. Wire transfers can be done by a simple bank account transfer, or by a transfer of cash at a cash office. Bank wire transfers are often the most expedient method for transferring funds between bank accounts. A bank wire transfer is a message to the receiving bank requesting them to effect payment in accordance with the instructions given.

The message also includes settlement instructions. The actual wire transfer itself is virtually instantaneous, requiring no longer for transmission than a telephone call.

- **Controlled Disbursement**: This is another product offered by banks under Cash Management Services. The bank provides a daily report, typically early in the day, that provides the amount of disbursements that would be charged to the customers account. This early knowledge of daily funds requirement allows the customer to invest any surplus in intraday investment opportunities, typically money market. This is different from delayed disbursements, where payments are issued through a remote branch of a bank and customer is able to delay the payment due to increased float time.

In the past, other services have been offered the usefulness of which has diminished with the rise of the Internet. For example, companies could have daily faxes of their most recent transactions or be sent CD-ROMs of images of their cashed checks.

These services can be costly but usually the cost to a company is outweighed by the benefits: cost savings, accuracy, efficiencies, etc.

Float

Float is defined as the difference between the book balance and the bank balance of an account. For example, assume that you go to the bank and open a checking account with $500. You receive no interest on the $500 and pay no fee to have the account.

Now assume that you receive your water bill in the mail and that it is for $100. You write a check for $100 and mail it to the water company. At the time you write the $100 check you also record the payment in your bank register. Your bank register reflects the book value of the checking account. The check will literally be "in the mail" for a few days before it is received by the water company and may go several more days before the water company cashes it.

The time between the moment you write the check and the time the bank cashes the check there is a difference in your book balance and the balance the bank lists for your checking account. That difference is float. This float can be managed. If you know that the bank will not learn about your check for five days, you could take the $100 and

invest it in a savings account at the bank for the five days and then place it back into your checking account "just in time" to cover the $100 check.

Time	Book Balance	Bank Balance
Time 0 (make deposit)	$500	$500
Time 1 (write $100 check)	$400	$500
Time 2 (bank receives check)	$400	$400

Float is calculated by subtracting the book balance from the bank balance.

Float at Time 0: $500 - $500 = $0
Float at Time 1: $500 - $400 = $100
Float at Time 2: $400 - $400 = $0

3.4 Accounts Receivable:

Accounts receivable is one of a series of accounting transactions dealing with the billing of customers who owe money to a person, company or organization for goods and services that have been provided to the customer. In most business entities this is typically done by generating an invoice and mailing or electronically delivering it to the customer, who in turn must pay it within an established timeframe called credit or payment terms.

An example of a common payment term is Net 30, meaning payment is due in the amount of the invoice 30 days from the date of invoice. Other common payment terms include Net60 and Net120 but could in reality be for any time period agreed upon by the vendor and client. While booking a receivable is accomplished by a simple accounting transaction, the process of maintaining and collecting payments on the accounts receivable subsidiary account balances can be a full time proposition. Depending on the industry in practice, accounts receivable payments can be received up to 10 - 15 days after the due date has been reached. These types of payment practices are sometimes developed by industry standards, corporate policy, or because of the financial condition of the client.

On a company's balance sheet, accounts receivable is the amount that customers owe to that company. Sometimes called trade receivables, they are classified as current assets. To record a journal entry for a sale on account, one must debit a receivable and credit a revenue account. When the customer pays off their accounts, one debits cash and credits the receivable in the journal entry. The ending balance on the trial balance sheet for accounts receivable is always debit. Business organizations which have become too large to perform such tasks by hand (or small ones that could but prefer not to do them by hand) will generally use accounting software on a computer to perform this task. Associated accounting issues include recognizing accounts receivable, valuing accounts receivable, and disposing of accounts receivable. **Accounts receivable** departments use the sales ledger. Other types of accounting transactions include accounts payable, payroll, and trial balance.

Since not all customer debts will be collected, businesses typically record an allowance for bad debts which is subtracted from total accounts receivable. When accounts receivable are not paid, some companies turn them over to third party collection agencies or collection attorneys who will attempt to recover the debt via negotiating payment plans, settlement offers or legal action.

Outstanding Advances are Part of Accounts Receivables:

If a company gets an order from its customers with advance agreed in payment terms. Since no billing is being done to claim the advances several times this area of collectible is not reflected in Accounts Receivables. Ideally, since advance payment is mutually agreed term, it is the responsibility of the accounts department to take out periodically the statement showing advance collectible and should be provided to sales and marketing for collection of advances. The payment of accounts receivable can be protected either by a letter of credit or by Trade Credit Insurance.

Companies can use their accounts receivable as collateral when obtaining a loan (Asset-based lending) or sell them through Factoring (finance). Pools or portfolios of accounts receivable can be sold in the capital markets through a Securitization.

Companies have two methods available to them for measuring the net value of account receivables, which is computed by subtracting the balance of an allowance account from the accounts receivable account. The first method is the allowance method, which

establishes a contra asset account, allowance for doubtful accounts, or more simply, allowance, as the offset to accounts receivable. Allowance is a contra asset that offsets the accounts receivable account to derive the net accounts receivable depicted in the balance sheet. The amount of the allowance can be computed in two ways; through the analysis based on sales method and analysis based on accounts receivable method. The reason a contra asset receivable account is necessary is to adhere to the matching principle of accounting, which mandates that accrual basis companies match all revenues and expenses with the period in which they are earned and incurred, respectively. The journal entry that establishes the allowance for doubtful accounts consists of debiting an expense account, usually referred to as an uncollectible account expense, and crediting the allowance contra asset account. Once it has been deemed that a particular account is uncollectible, it would be necessary to take the account off a company's books by debiting allowance for doubtful accounts and crediting the associated accounts receivable account.

The second method, known as the direct write off method, is simpler than the allowance method in that allows for one simple entry to reduce accounts receivable to its net realizable value. The entry would consist of debiting an uncollectible expense account and crediting the respective account receivable.

Discounts and Allowances:

Discounts and allowances are reductions to a basic price. They could modify either the manufacturer's list price (determined by the manufacturer and often printed on the package), the retail price (set by the retailer and often attached to the product with a sticker), or the list price (which is quoted to a potential buyer, usually in written form). The market price (also called effective price) is the amount actually paid. The purpose of discounts is to increase short-term sales, move out-of-date stock, reward valuable customers, or encourage distribution channel members to perform a function. Some discounts and allowances are forms of sales promotion.

Types of Discounts and Allowances:

The most common types of discounts and allowances are:

- **Cash Discounts for Prompt Payment** - These are intended to speed payment and thereby provide liquidity to the firm. They are sometimes used as a promotional device. Examples are:
    - 2/10 net 30 - this means the buyer must pay within 30 days, but will receive a 2% discount if they pay within 10 days.
    - 3/7 EOM - this means the buyer will receive a cash discount of 3% if the bill is paid within 7 days after the end of the month.
    - 3/7 EOM net 30 - this means the buyer must pay within 30 days after end of month, but will receive a 3% discount if they pay within 7 days after the end of the month.
    - 2/15 net 40 ROG - this means the buyer must pay within 40 days of receipt of goods, but will receive a 2% discount if paid in 15 days.
- **Cash Discounts for Preferred Payment Method** - Some retailers (particularly small retailers with low margins) offer discounts to customers paying with cash, to avoid paying fees on credit card transactions.
- **Quantity Discounts** - These are price reductions given for large purchases. The rationale behind them is to obtain economies of scale and pass some (or all) of these savings on to the customer. In some industries, buyer groups and co-ops have formed to take advantage of these discounts. Generally there are two types:
    - Cumulative quantity discounts (also called accumulation discounts). These are price reductions based on the quantity purchased over a set period of time. The expectation is that they will impose an implied switching cost and thereby bond the purchaser to the seller.
    - Non-cumulative quantity discounts. These are price reductions based on the quantity of a single order. The expectation is that they will encourage larger orders, thus reducing billing, order filling, shipping, and sales personal expenses.
- **Trade Discounts** (also called functional discounts) - These are payments to distribution channel members for performing some function. Examples of these

functions are warehousing and shelf stocking. Trade discounts are often combined to include a series of functions, for example 20/12/5 could indicate a 20% discount for warehousing the product, an additional 12% discount for shipping the product, and an additional 5% discount for keeping the shelves stocked. Trade discounts are most frequent in industries where retailers hold the majority of the power in the distribution channel (referred to as channel captains).

- **Seasonal Discounts** - These are price reductions given when an order is placed in a slack period (example: purchasing skis in April in the northern hemisphere, or in September in the southern hemisphere). On a shorter time scale, a happy hour may fall in this category.

- **Forward Dating** - This is where the purchaser doesn't pay for the goods until well after they arrive. The date on the invoice is moved forward - example: purchase goods in November for sale during the December holiday season, but the payment date on the invoice is January 7th.

- **Promotional Allowances** - These are price reductions given to the buyer for performing some promotional activity. These include an allowance for creating and maintaining an in-store display or a co-op advertising allowance.

- **Brokerage Allowance** - From the point of view of the manufacturer, any brokerage fee paid is similar to a promotional allowance. It is usually based on a percentage of the sales generated by the broker.

- **Trade-ins** - This can be a way of reducing the price. By offering more for a trade-in than it is actually worth, the net effect is to reduce the effective price earned by the seller. The advantage of this is it encourages replacement sales without altering the list price or the perceived value.

Dependence of Price on Quantity:

An extreme form of quantity discount is when, within a quantity range, the price does not depend on quantity:

- if one wants less than the minimum amount one has to be pay for the minimum amount anyway

- if one wants an amount between two of the fixed amounts on offer, one has to pay for the higher amount

These also apply in the case of a service with "quantity" referring to time. For example, an entrance ticket for a zoo is usually for a day; if one stays shorter, the price is the same. It is a kind of pass for unlimited use of a service during a day, where one can distinguish whether or not, when leaving and returning, one has to pay again. Similarly a pass can be for another period. In the case of long periods, it is obvious that one can leave and return without paying again.

If one has to buy more than one wants, we can distinguish between the surplus just not being used, or the surplus being a nuisance, e.g. because of having to carry a large container.

3.5 Inventory:

Inventory is a list for goods and materials, or those goods and materials themselves, held available in stock by a business. Inventory are held in order to manage and hide from the customer the fact that manufacture/supply delay is longer than delivery delay, and also to ease the effect of imperfections in the manufacturing process that lower production efficiencies if production capacity stands idle for lack of materials.

The Reasons for Keeping Stock:

There are three basic reasons for keeping an inventory:

1. Time - The time lags present in the supply chain, from supplier to user at every stage, requires that you maintain certain amount of inventory to use in this "lead time"

2. Uncertainty - Inventories are maintained as buffers to meet uncertainties in demand, supply and movements of goods.

3. Economies of scale - Ideal condition of "one unit at a time at a place where user needs it, when he needs it" principle tends to incur lots of costs in terms of logistics. So Bulk buying, movement and storing brings in economies of scale, thus inventory.

All these stock reasons can apply to any owner or product stage.

- **Buffer Stock** is held in individual workstations against the possibility that the upstream workstation may be a little delayed in long setup or change-over time. This stock is then used while that change-over is happening. This stock can be eliminated by tools like SMED.

These classifications apply along the whole Supply chain not just within a facility or plant.

Where these stocks contain the same or similar items it is often the work practice to hold all these stocks mixed together before or after the sub-process to which they relate. This 'reduces' costs. Because they are mixed-up together there is no visual reminder to operators of the adjacent sub-processes or line management of the stock which is due to a particular cause and should be a particular individual's responsibility with inevitable consequences. Some plants have centralized stock holding across sub-processes which makes the situation even more acute.

Special Terms Used in Dealing with Inventory:

- *Stock Keeping Unit* (SKU) is a unique combination of all the components that are assembled into the purchasable item. Therefore any change in the packaging or product is a new SKU. This level of detailed specification assists in managing inventory.
- *Stock out* means running out of the inventory of an SKU.
- "New old stock" (sometimes abbreviated NOS) is a term used in business to refer to merchandise being offered for sale which was manufactured long ago but that has never been used. Such merchandise may not be produced any more, and the new old stock may represent the only market source of a particular item at the present time.

Inventory Examples:

While accountants often discuss inventory in terms of goods for sale or export, organizations - manufacturers, service-providers and not-for-profits - also have inventories (fixtures, furniture, supplies,...) that they do not intend to sell.

Manufacturers', distributors', and wholesalers' inventory tends to cluster in warehouses. Retailers' inventory may exist in a warehouse or in a shop or store accessible to customers. Inventories not intended for sale to customers or to clients may be held in any premises an organization uses. Stock ties up cash and if uncontrolled it will be impossible to know the actual level of stocks and therefore impossible to control them.

3.6 Accounts Payable:

Accounts payable is a file or account that contains money that a person or company owes to suppliers, but hasn't paid yet (a form of debt). When you receive an invoice you add it to the file, and then you remove it when you pay. Thus, the *A/P* is a form of credit that suppliers offer to their purchasers by allowing them to pay for a product or service after it has already been received.

In household, accounts payable are ordinarily bills from the electric company, telephone company, cable television or satellite dish service, newspaper subscription, and other such regular services. Householders usually track and pay on a monthly basis by hand using cheques or credit cards. In a business, there is usually a much broader range of services in the A/P file, and accountants or bookkeepers usually use accounting software to track the flow of money into this liability account when they receive invoices and out of it when they make payments.

Commonly, a supplier will ship a product, issue an invoice, and collect payment later, which creates a cash conversion cycle, a period of time during which the supplier has already paid for raw materials but hasn't been paid in return by the final customer. Certain companies, most famously Dell have been able to profit handsomely by reversing the conversion cycle: they receive payment *before* they ship the product. Instead of granting credit to their customers, they receive it from them. When the invoice arrives it is matched to the packing slip and purchase order, and if all is in order, the invoice is paid. This is referred to as the three-way match.

3.7 Accrual:

Accrual is derived from the verb accrue, which describes the gathering or clustering of things together over time, as atoms, or it describes a general increase in number, as in interest. It also holds specific meanings in the contexts of accounting and payroll.

As applied to accounting, accrual describes the concept (known as accrual accounting) where a revenue or expense is not recorded (recognized) at the same moment in time as the related cash inflow / outflow.

For example, on December 30, 2013, a company delivers a product to a customer who will pay for that product 30 days later. Assuming the fiscal year ends on December 31, the company discloses that revenue in 2013 Income Statement even though it will get paid during the following fiscal year.

Similarly, the sales representative that sold the product is entitled to his or her commission at the moment of sale (or delivery). That means the company will record an expense (Salesperson's Salaries and Commissions) in its 2013 Income Statement, even though the rep will actually get paid at the end of the following week, in January, 2014.

Unfortunately, the term accrual is also often used as an abbreviation for the terms accrued expense or accrued revenue, items which may share a common name but have a different economic / accounting characteristic. Accrued revenue is a receivable for other revenue. It is disclosed separately on the balance sheet primarily to allow investors to differentiate receivables from core operations from receivables from peripheral operations. An **accrued expense**, on the other hand, is a liability with an uncertain timing or amount but where the uncertainly is not significant enough to qualify it as a provision.

3.8 Short Term Financing:

Credit is the provision of resources (such as granting a loan) by one party to another party where that second party does not reimburse the first party immediately, thereby generating a debt, and instead arranges either to repay or return those resources (or material(s) of equal value) at a later date. The first party is called a creditor, also known as a lender, while the second party is called a debtor, also known as a borrower.

Any movement of financial capital is normally quite dependent on credit, which in turn is dependent on the reputation or creditworthiness of the entity which takes responsibility for the funds.

The term *credit* is used similarly in commercial trade, known as "trade credit", to refer to the approval for delayed payments for purchased goods. Sometimes, credit is not granted

to a person who has financial instability or difficulty. Companies frequently offer credit to their customers as part of the terms of a purchase agreement. Organizations that offer credit to their customers frequently employ a credit manager.

Credit is denominated by a unit of account. Unlike money (by a strict definition), credit itself cannot act as a unit of account. However, many forms of credit can readily act as a medium of exchange. As such, various forms of credit are frequently referred to as *money* and are included in estimates of the money supply.

Credit is also traded in the market. The purest form is the credit default swap market, which is essentially a traded market in credit insurance. A credit default swap represents the price at which two parties exchange this risk — the protection "seller" takes the risk of default of the credit in return for a payment, commonly denoted in basis points (one basis point is 1/100 of a percent) of the notional amount to be referenced, while the protection "buyer" pays this premium and in the case of default of the underlying (a loan, bond or other receivable), delivers this receivable to the protection seller and receives from the seller the par amount (that is, is made whole).

3.9 Cash Conversion Cycle:

Cash conversion cycle or **CCC**, also known as the asset conversion cycle, net operating cycle, working capital cycle or just cash cycle, is used in the financial analysis of a business. The higher the number, the longer a firm's money is tied up in business operations and unavailable for other activities such as investing. The cash conversion cycle (CCC) is one of several measures of management effectiveness. It measures how fast a company can convert cash on hand into even more cash on hand. The CCC does this by following the cash as it is first converted into inventory and accounts payable (AP), through sales and accounts receivable (AR), and then back into cash. Generally, the lower this number is, the better for the company. Although it should be combined with other metrics (such as return on equity and return on assets) it can be especially useful for comparing close competitors because the company with the lowest CCC is often the one with better management. In this article, we'll explain how CCC works and show you how to use it to evaluate potential investments. The cash conversion cycle is the number of days between paying for raw materials and receiving cash from selling goods made from that raw material.

Cash Conversion Cycle = (Average Stockholding Period) + (Average Receivables Processing Period) – (Average Payables Processing Period)

Where:

- Average Stockholding Period (in days) = Closing Stock / Average Daily Purchases
- Average Receivables Processing Period (in days) = Accounts Receivable / Average Daily Credit Sales
- Average Payable Processing Period (in days) = Accounts Payable / Average Daily Credit Purchases

The cash conversion cycle (CCC) is a key measurement of small business liquidity. The cycle is in essence the length of time between cash payment for purchase of resalable goods and the collections of accounts receivable from the sale of such goods to customers; as such, it focuses on the length of time that funds are tied up in the cycle. Large business firms tend to have shorter CCC periods than do small retail businesses. The latter institutions, however, can take steps to reduce the length of their cash conversion cycles, including reducing inventories or receivables conversions. CCC length is also inversely related to organizational cash flows, and a significant positive relationship exists between CCCs and current and quick ratios.

Effective management of the cash conversion cycle is imperative for small business owners. Indeed, it is cited by economists and business consultants as one of the truest measurements of business health available to entrepreneurs, especially during periods of growth. "Some of the traditional tools designed to provide a measure of overall guidance can become unstable at high rates of growth," explained John Costa in *Outlook*. "Others are more dangerous still; they provide the wrong signal at crucial points of working capital buildup. For example, the current and quick ratios are popular with companies and their bankers. In a period when collections have slowed, asset turns have become sluggish and vendors have not extended terms beyond previously agreed limits, the current ratio would probably look good." At the same time, the quick ratio may even show improvement or remain steady, even though the company is actually in substantial need of working capital. This happens, suggested Costa, because of the balance-sheet-

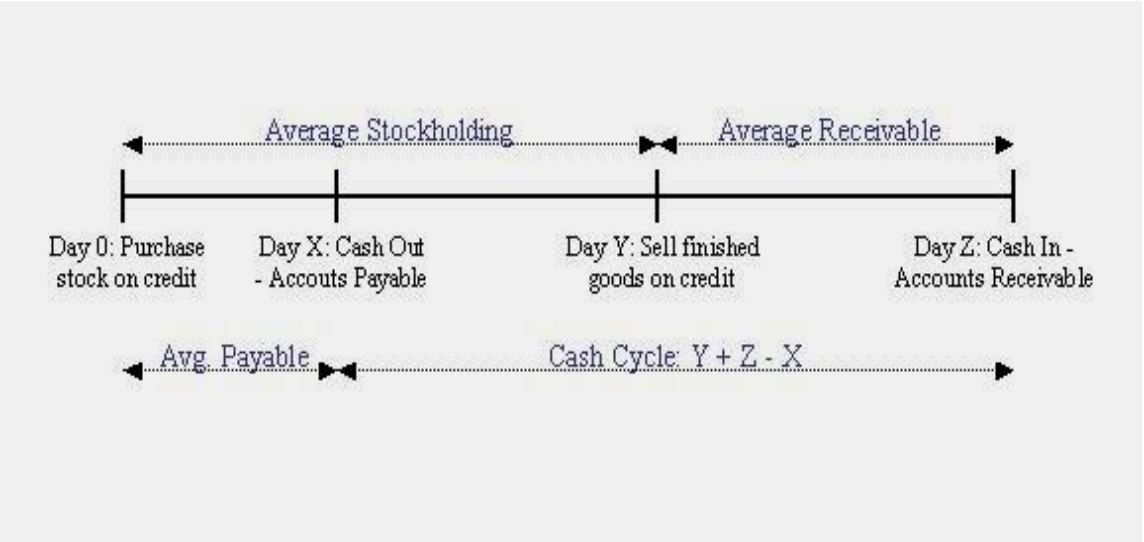
oriented limitations of current and quick ratios. "These quick and dirty ratios fall short of what a rapidly changing, dynamic company needs," he stated flatly.

Instead of the above, potentially misleading measurements, small business owners should consider using cash conversion cycles, which, according to Costa usually provide a more accurate reading of working capital pressure on cash flows. "The objective is to keep your CCC as low as possible," he explained. "At a minimum, you should strive to maintain a constant CCC during periods of rapid sales growth. Unless inventory, credit, or vendor policies change, rapid growth should not cause the CCC to increase. Because the CCC is related to asset turnover, it is more dynamic and therefore more accurate. What's more, it is easy to calculate" and explain to key staffers.

Cash conversion cycles for small businesses are predicated on four central factors: 1) the number of days it takes customers to pay what they owe; 2) the number of days it takes the business to make its product (or complete its service); 3) the number of days the product (or service) sits in inventory before it is sold; 4) the length of time that the small business has to pay its vendors. *Inc.* provided the following formulas to determine these factors:

- Small businesses can figure their accounts receivable days by dividing their receivables balance by their last 12 months' sales, then multiplying the result by 365 (the number of days in a year).
- Inventory days, meanwhile, can be determined by taking inventory balance, dividing by the last 12 months' cost of goods sold, and then multiplying the result by 365.
- Accounts payable days can be figured by taking the company's payables balance, dividing it by the last 12 months' cost of goods sold, and then multiplying the resulting figure by 365.

Once a small business owner has these figures in hand, he/she can figure out the company's cash conversion cycle by adding the receivable days to the production and inventory days, then subtracting the payables days.



A short cash conversion cycle indicates good working capital management. Conversely, a long cash conversion cycle suggests that capital is tied up while the business waits for customers to pay.

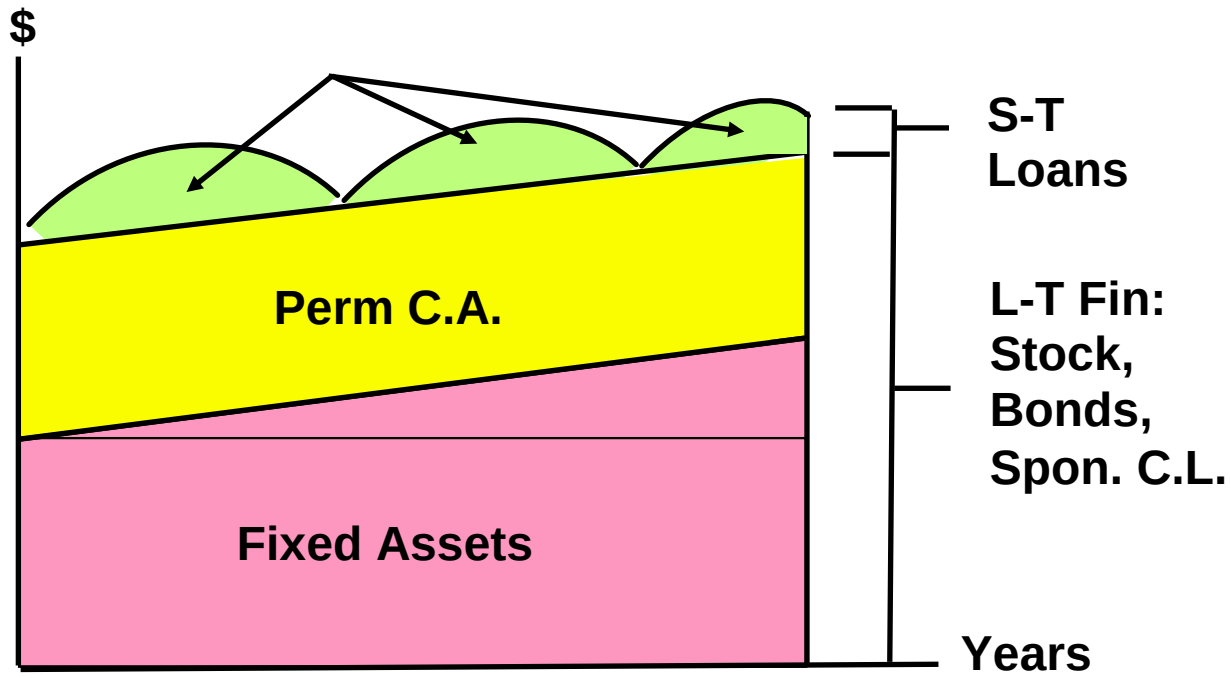
It is possible for a business to have a ***negative cash conversion cycle***, i.e. receiving customer payments before having to pay suppliers. Examples are typically companies that employ Just In Time practices such as Dell, and companies that buy on extended credit terms and sell for cash, such as Tesco.

The longer the production process, the more cash the firm must keep tied up in inventories. Similarly, the longer it takes customers to pay their bills, the higher the value of accounts receivable. On the other hand, if a firm can delay paying for its own materials, it may reduce the amount of cash it needs. In other words, accounts payable reduce net working capital.

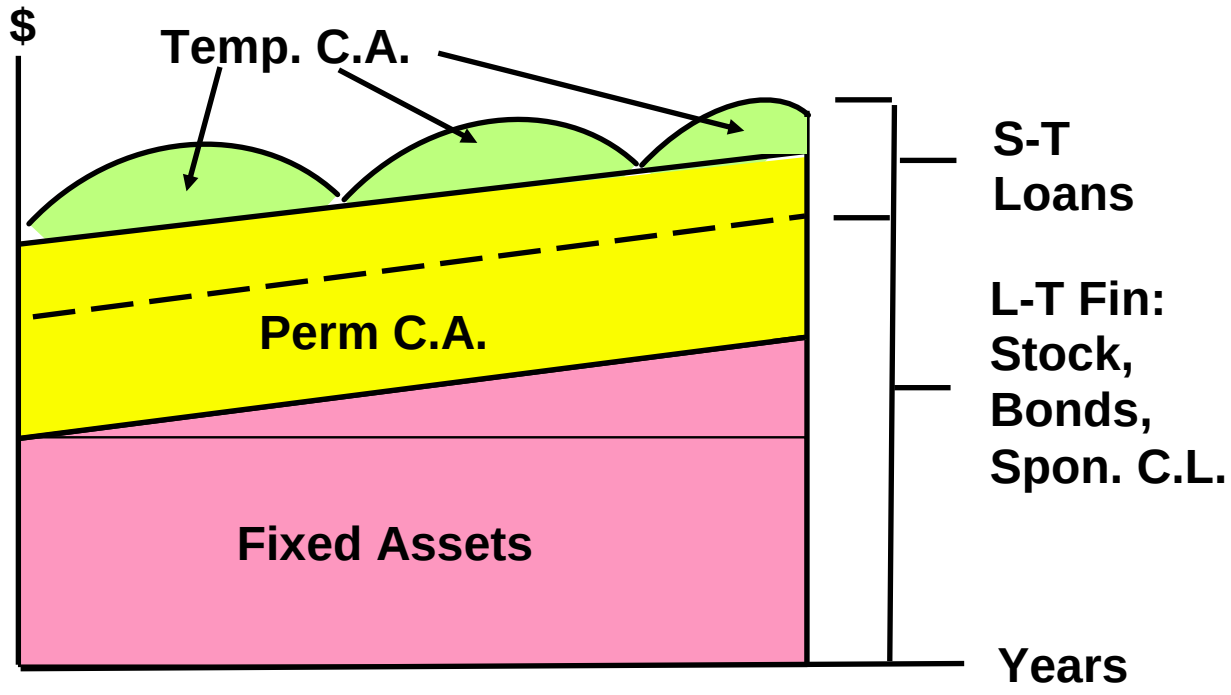
3.10 Working Capital Policies

- Maturity Matching: Matches the maturity of the assets with the maturity of the financing.
- Aggressive: Uses short-term (temporary) capital to finance some permanent assets.
- Conservative: Uses long-term (permanent) capital to finance some temporary assets.

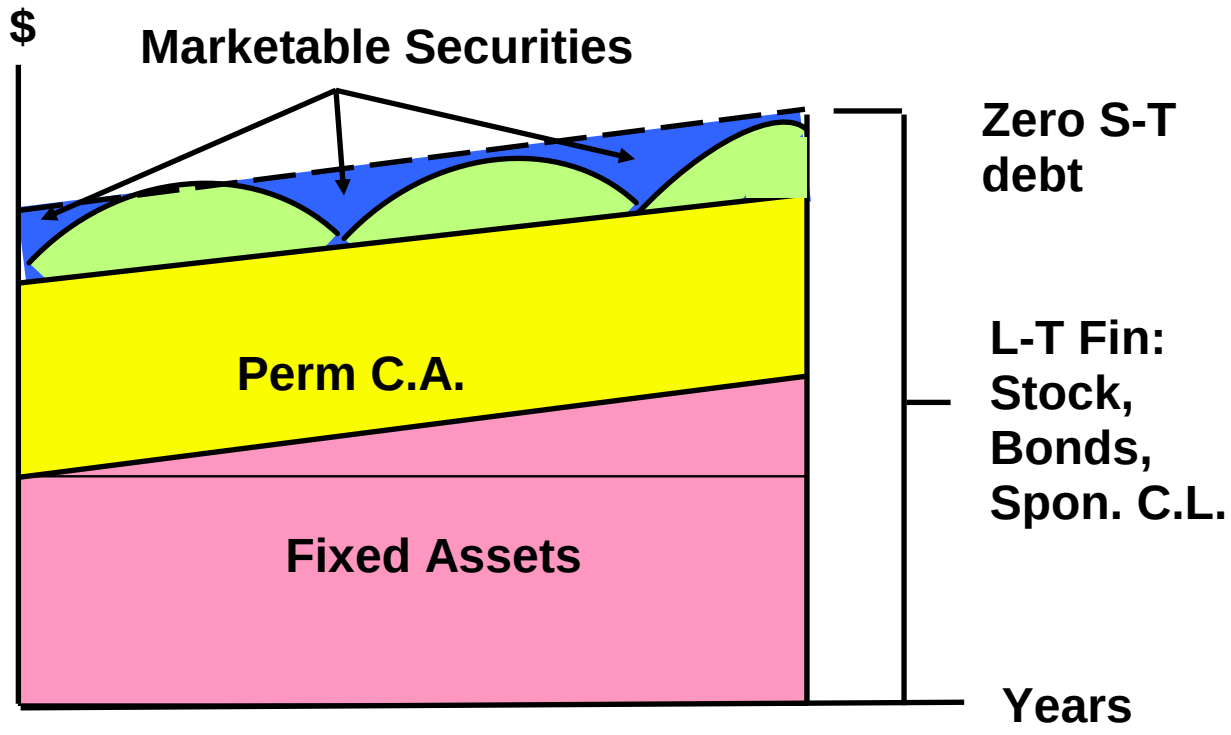
Maturity Matching Financing Policy:



Aggressive Financing Policy



Conservative Financing Policy



- The choice of working capital policy is a classic risk/return tradeoff.
- The aggressive policy promises the highest return but carries the greatest risk.
- The conservative policy has the least risk but also the lowest expected return.
- The moderate (maturity matching) policy falls between the two extremes.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Working Capital Management Crystal Composite Ltd.

Working Capital Financing Policy of crystal composite ltd is between moderate and conservative financing policy because traditionally Crystal keeps relatively high level of inventories and cash. Due to industry characteristics it has to offer moderate options for accounts receivables on credit sales. But as Crystal is the industry leader, it can exercise less flexibility for its accounts receivables. Due to some reasons Crystal need short term loan from commercial banks. The reasons are the following:

- ✓ Payment of dividend
- ✓ BTB L/C payments
- ✓ Salary
- ✓ Other reasons
- ✓ Interests

Crystal Composite Limited maintains some balances of current assets over the entire year because of carrying on operation at any time. Permanent current assets are cash, inventories and receivables which are maintained as a minimum.

Crystal's policies for managing its working capital should be designed to achieve following three goals:

- **Maintaining Adequate Liquidity:** If Crystal lacks sufficient cash to pay its bills when due, it will experience continuing problem. So, the most important goal is to achieve adequate liquidity for the conduct of day to day operation.
- **Minimizing Risk:** In selecting Crystal's sources of financing, payables and other short term liabilities may involve relatively low costs. Crystal must ensure that these near term obligations don't become excessive compared to the current assets on hand to pay them. The matching of assets and liabilities among current accounts is a task of minimizing the risk of being unable to pay bills and other obligations. On the other

hand, Crystal has to stock safer amount of inventories and raw materials to avoid stock out cost and stoppage in manufacturing.

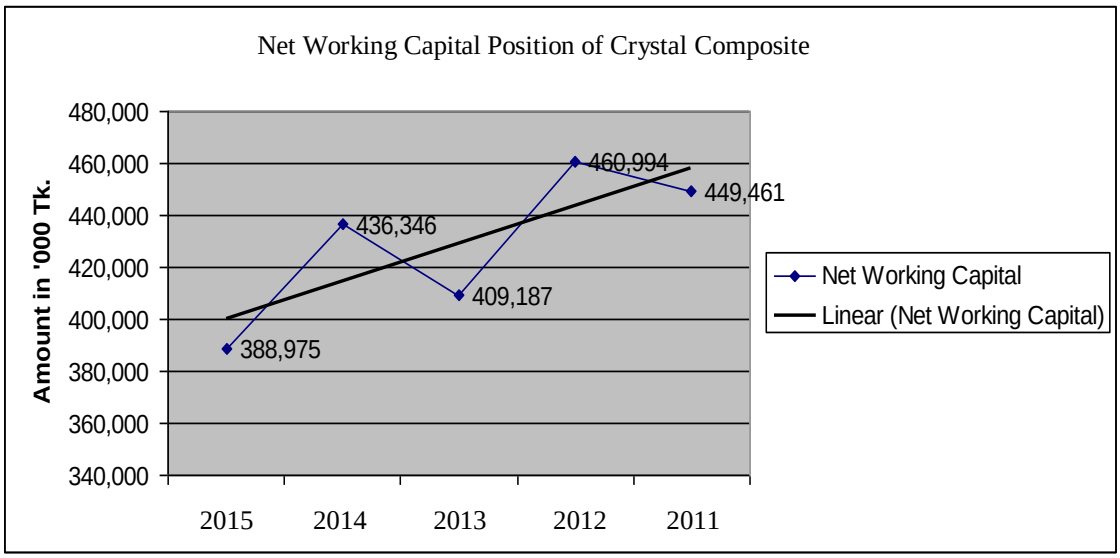
- **Contributing to Maximizing Crystal's Value:** Crystal holds working capital for the same purpose as it holds other assets, which are to maximize the present values of common stocks and the value of the company. Generally, Crystal should not hold idle current assets any more that it should idle fixed assets. By investing the idle cash in treasury bills and fixed accounts, minimizing the stock level, speedily collecting receivables and eliminating unnecessary and costly short term financing Crystal tries to maximize the value of the company.

4.2 Working Capital Position of Crystal Composite Ltd.:

The total position of Working capital of Crystal composite Ltd and its segregation from 2012 to 2015 is given below:

Current assets	2015	2014	2013	2012	
Inventories	1667454	593140	000	000	
Trade and other receivables	000	000	000	000	
Cash and cash equivalents	2515187	1728788	290107	1587950	
Total	4182641	2321928	290107	1587950	
Current Liabilities and Provisions	2015	2014	2013	2012	
Trade and other payables	13600000	2415665	8600000	000	
Current tax liabilities	150180	103737			
Bank overdrafts and loans	5862483	2954462			
Audit fees	9000	9000			
Total	19621663	5482864	8600000	000	

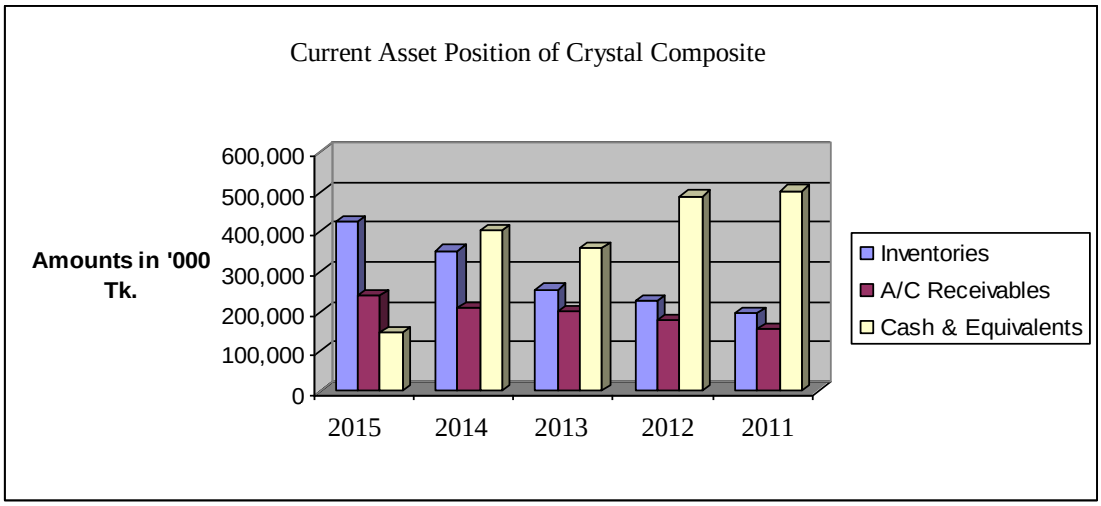
From the table we can see the value of different current assets and current liabilities components as well as Net Working Capital. From the following graph we see the declining trend as at the position of Net working Capital of Crystal Composite Limited is decreasing over the years.



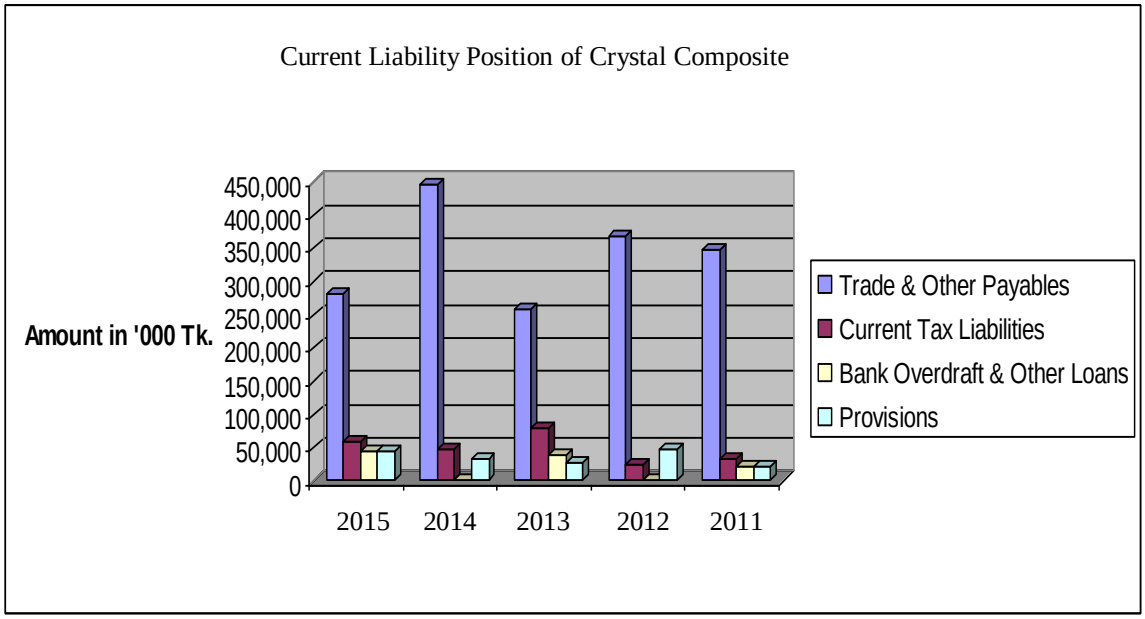
This declining trend is caused by decreasing current assets position compare to current liability.

From the following graph, we see that over the years Crystal's cash position is deteriorating because of increase in investment activities in fixed assets and increase in financing activities. After going public Crystal has to increase its dividend payments and other financing expenses which lead to reduced cash balance over the years.

Other characteristics of Crystal's current assets position is the increase in inventory and accounts receivables over the years. As the industry is getting more competitive and vast Crystal increases its inventory position to meet huge demand for growing construction and development works all over the country. For the reason it relaxed its credit policies to increase sales. So from the following graph we can see the increasing trend in inventory and accounts receivables level over time.



From the following graph, we understand that Accounts payable is solely the largest components of current liability for Crystal Paints compare to other components. Accounts payables are created for raw material and container purpose. We can see a mixed trend in accounts payables in the selected years.



4.3 Ratio Analysis of Crystal Composite Limited

The performance of working capital of Crystal Composite is evaluated by working out different ratios such as: liquidity ratios, Operating WC efficiency ratio, activity ratio and profitability ratio.

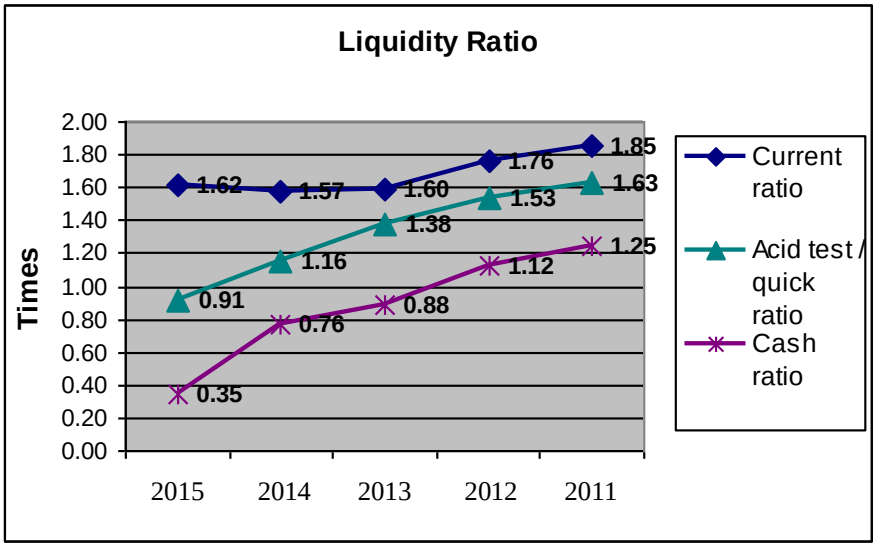
Liquidity Ratio:

Liquidity Ratios	Formula	2015	2014	2013	2012	2011
Current ratio	Current assets / Current liabilities	1.62	1.57	1.60	1.76	1.85
Acid test / quick ratio	Current assets – Inventory / Current liabilities	0.91	1.16	1.38	1.53	1.63
Cash ratio	Cash and cash equivalents / Current liabilities	0.35	0.76	0.88	1.12	1.25

Interpretation of the Ratios:

Liquidity Ratios: The liquidity ratios like Current Ratio, Quick Ratio and Super Quick Ratio were decreasing with a mixed trend.

Current Ratio: was decreased from 2012 than remain almost constant in 2013, 2014 and 2015.



Cash Ratio: were consistently decreasing as Crystal's inventory level was increased compare to other liquid assets and cash and near cash items also decreased in these years. Thus Crystal's immediate short term obligation was also decreased and that signs risk in the solvency of Crystal's working capital management.

Operating Working Capital Efficiency:

The components of operating WC are accounts receivable, accounts payable, inventory. We can measure the operating WC using following formula:

Operating WC = {(Current assets – cash and marketable securities) – (Current Liabilities – Short term and current portion of long term debt)}

Ratios	**Formula**	**2015**	**2014**	**2013**	**2012**	**2011**
Operating WC to Sales ratio	Operating working capital / Sales	9.89%	3.18%	4.51%	1.22%	-2.48%
Operating WC Turnover	Sales / Operating working capital	10.11	31.41	22.17	82.10	(40.30)

Operating WC to Sales ratio: It is the indicator of OWC as a percentage of sales. In the following graph it reveals that OWC as % of sales is decreasing gradually

Thus the firm's operating working capital efficiency is declining year by year and has to keep more WC against sales.

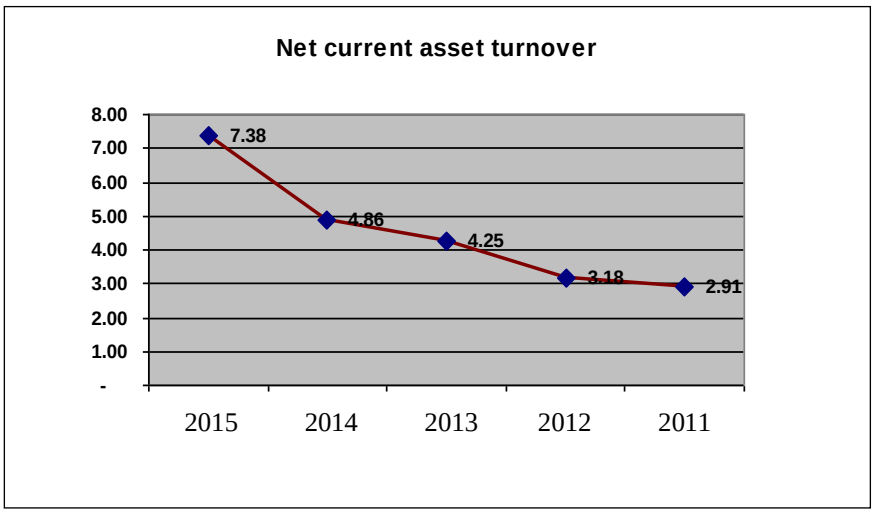
Operating WC Turnover: The ratio indicates how much sales of a firm is able to generate for each amount invested in its operating working capital.

In the following graph we see that Crystal's OWC turnover is decreasing significantly from 2014 which reveals it has to compile more OWC to generate sales as well as it can generate less amount sales against per unit of OWC.

Current assets turnover	Sales / Current assets	3.51	2.2	2.13	1.63	0.53
Net current assets turnover	Sales / Net current assets	7.38	4.86	4.25	3.18	2.91

Current Asset Turnover: In the following graph we see that the current asset turnover is increasing gradually which denotes the WCM efficiency as sales is being increased using less amount of current asset.

Net Current Asset Turnover: The same trend is observed in the following also and the ratio is increasing steadily.



Asset turnover Ratios were increasing consistently in mixed trends implies that efficient use of assets in generating sales.

4.4 Cash Position of Crystal Composite Ltd.

We know that the general trend in cash position from 2011 to 2015 was declining and in 2015 it is almost 3 times less than 2014. From 2014 to 2015 the cash position of Crystal Composite decreased because of large investment in Plant, Property and Equipment. Crystal invested almost 120 million cash in fixed assets during that time.

Analysis of Summarized Cash Flow Statement of Crystal Composite Limited:

Crystal **Paints Bangladesh Limited**					
Summarized Cash Flow Statement					
for the year ended 31 December 2015 (Taka in '000)					
	2015	**2014**	**2013**	**2012**	**2011**
Cash Flows from Operating Activities (A)					
Net cash from operating activities	363,100	58,178	309,552	268,971	315,523
Cash Flows from Investing Activities (B)					
Net cash used in investing activities	(158,830)	(38,077)	(88,713)	(39,938)	(62,636)
Cash Flows from Financing Activities (C)					
Net cash (used in) from financing activities	(458,499)	23,947	(352,472)	(242,323)	(170,729)
Net increase (decrease) in cash and cash equivalents	(254,229)	44,048	(131,633)	(13,290)	82,158
Cash and cash equivalents at the beginning of the year	402,661	358,613	490,246	503,536	421,378
Bank balances and cash	148,432	402,661	358,613	490,246	503,536

From the table and graph we can understand the actual flow of cash and the reason for deteriorating cash balance over the years. From the balance sheet, we come to know that the cash position of crystal composite ltd was decreasing and we got the answer here. The cash position of crystal composite ltd was decreasing because Crystal's investment and financing activities exceed the cash flow from operation. And from the trend in cash flows we got that the net cash used in investing activities shows consistent increase as Crystal increase its investment in fixed assets and its other cash flows showed mixed trends as well.

4.5 Inventory Position of Crystal

To keep safety stock level and to meet the growing demand of the market Crystal has to stock an increasing level of inventory. However the inventory position is increasing in recent years than past years. Because Crystal is a manufacturing concern, its inventory management is one the most important aspects of working capital management.

Inventory management system of Crystal Composite Limited has two main concerns. One relates to the level of customer service, that is, to have the right goods, in sufficient quantities, in the right place, and at the right time. The other relates to the cost of ordering and carrying inventories. As the leading composite manufacturing company, crystal composite ltd places a great importance in valuation and management of inventories.

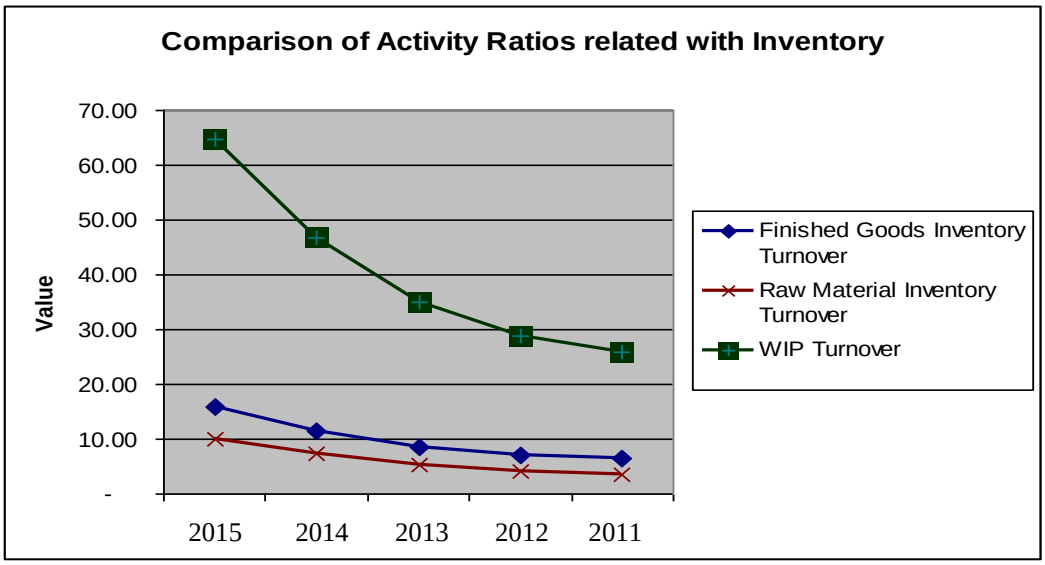
The main functions performed in Crystal for proper inventory management is as follows**:**

- To ensure material is available i.e. maintains appropriate level of inventory in the warehouse and to receipt custody and issue of materials.
- To ensure the recording of all stock movement.
- To minimize investment in inventory.
- To co-ordinate with management, maintenance, production, marketing and finance departments and other departments in the company for meeting their requirements for materials and spares.
- To assist in devising Management Reports.

Activity Ratios:

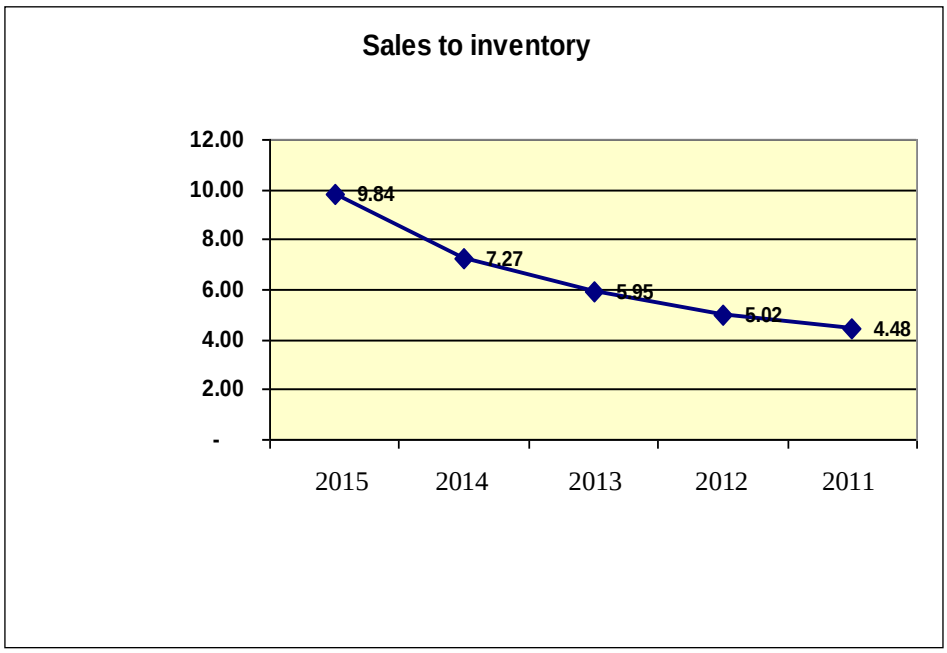
Activity ratios	Formula	2015	2014	2013	2012	2011
Finished goods turnover	Cost of sales / Average FG inventory	15.92	11.49	8.61	7.07	6.38
Raw material turnover	Cost of material consumed / Average RM inventory	10	7.39	5.2	4.14	3.66
WIP turnover	Cost of production / Average WIP inventory	64.72	46.71	35.03	28.77	25.95
Sales to total inventory	Sales / Average total inventory	9.84	7.27	5.95	5.02	4.48
Inventory to sales	Average total inventory Sales	10.20%	13.80%	16.80%	19.90%	22.30 %

Interpretation of Activities Ratios:

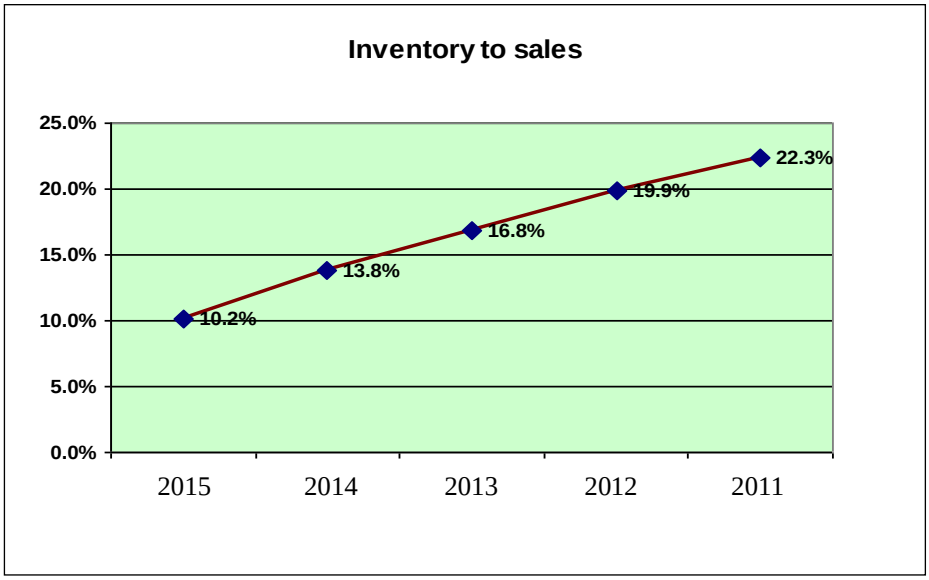


Finished Goods Inventory Turnover ratio was increasing steadily because of the increase in sales of finished goods in these years.

Raw Materials Inventory Turnover ratio is increasing steadily because of the increase in cost of material consumed in these years.



Work In Process Turnover ratio was increased largely because of increasing work in process goods in the manufacturing process of crystal composite ltd



These two ratios have almost opposite affects. Sales to inventory ratio was increasing because sales was increasing in terms of inventory level. And for the same reason Inventory to sales ratio was decreasing.

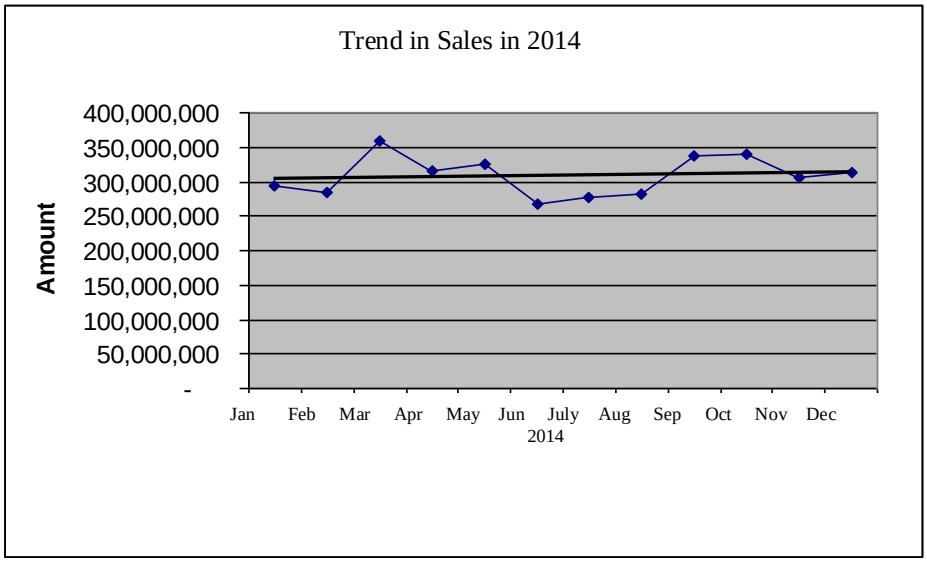
4.6 Accounts Payable Position of Crystal Composite Ltd.

The amount of Account Receivables is increasing at almost constant rate from 2011 to 2015. In 2015 Account Receivables was increased by 16% from 2014.

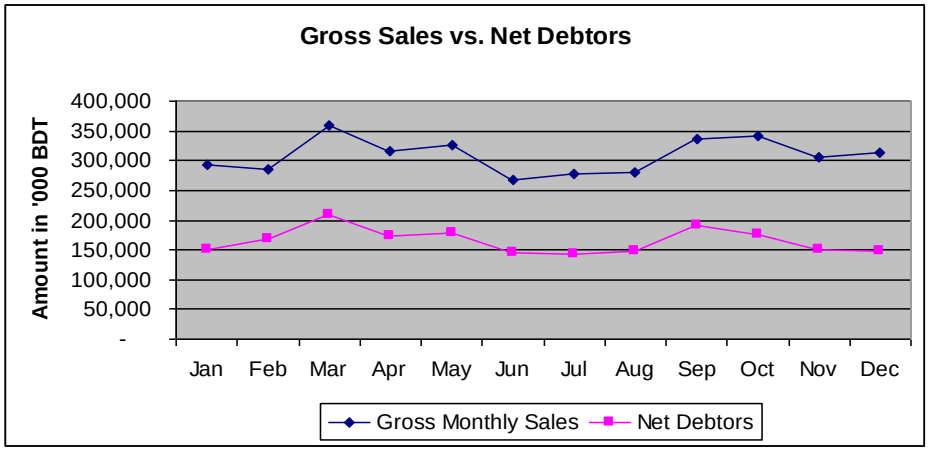
The main reason for increasing the account receivables is given below:

- ✓ Increasing competition in the paint industry
- ✓ To keep up the sales growth rate
- ✓ To finance loyal dealers and agents throughout the world

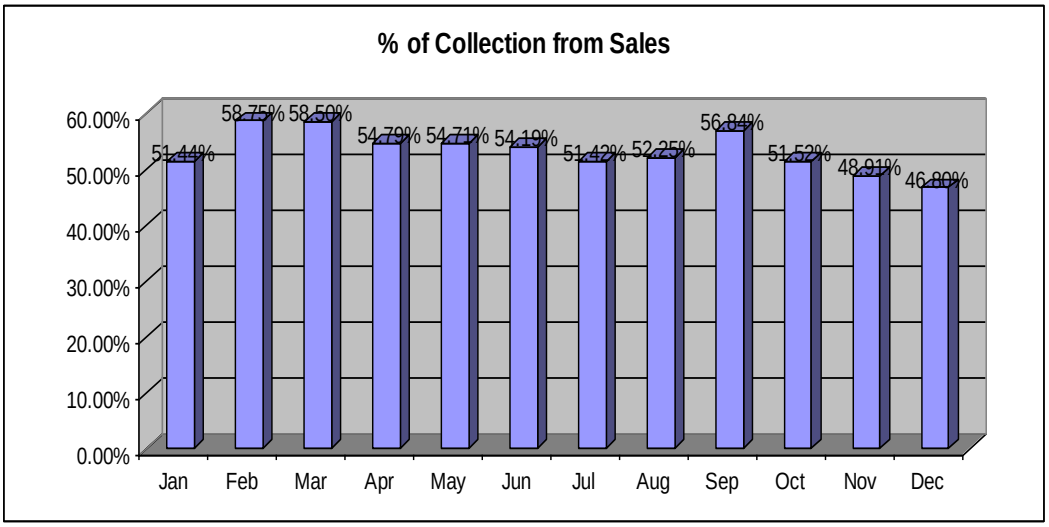
Monthly trend in Sales in 2014 was showed below:



From the graph, we can see that the highest sales in 2014 was occurred in March because of massive construction related works are made in this month due to suitable environment and the lowest sales in 2014 was occurred in June because of rainy seasons which is not suitable month for constructions related work. The trend line indicates that the sales trend was more or less stable from month to month in 2014. So; overall the fluctuation of sales from month to month in 2014 is not so significant in crystal composite ltd. In the following I've shown the monthly sales and collections from different depots of crystal composite ltd. The trend in sales is increasing slightly and March is the peak season while on an average June is the lean season for sales.



Aount of monthly gross sales as well as net trade debtors are shown in a mixed trend in the year 2007. On an average more than 50% of account receivables are collected from each month's sales and rest of the amount of each month's is collected in the next month.



This trend is quite satisfactory in generating collection out of the credit sales and Crystal managed to recover the debtors smartly the allowing them some incentives to foster the payments.

Types of discounts and allowances given to trade debtors by *crystal composite ltd*:

Besides Target Achievement Tours in abroad the most common types of discounts and allowances are:

- **Additional Target Achievement Bonus (ATAB):**

This type of bonus is paid to those dealers who can achieve additional sales target within one month. From the beginning of the month the dealers are given budgeted sales to

achieve within the month. If the dealer achieves the target he will get 5% bonus out of the sales.

- **Regular Payment Rebate Scheme:**

This special rebate scheme is open for those dealers who pay cash on regular basis and whose credit history is very clean. Generally this rebate rate is 2% - 2.5%.

- **Cash discounts for prompt payment**:

These are intended to speed payment and thereby provide liquidity to the firm. They are sometimes used as a promotional device. In case of Crystal it follows a unique rate as follows:

  - If a dealer pays within 30 days, he will receive a 2.5% discount.
  - If a dealer pays within 45 days, he will receive a 2% discount.
  - If a dealer pays within 60 days, he will receive a 1.5% discount
  - If a dealer pays his due within 90 days he wont claim for any rebate or discounts

- **Quantity discounts:**

These are price reductions given for large purchases. The rationale behind them is to obtain economies of scale and pass some (or all) of these savings on to the customer. In some industries, buyer groups and co-ops have formed to take advantage of these discounts.

- **Trade discounts**:

These are payments to distribution channel members for performing some function. Examples of these functions are warehousing and shelf stocking. Trade discounts in case of Crystal are 8%-10% in all products.

- **Exclusivity:**

This is a strategic rebate and discount for the dealers who don't sell rival's product and only sell Crystal's products. The dealer may have other products in his shop but he will try his level best to sell Crystal's products. If Crystal's market survey finds that his

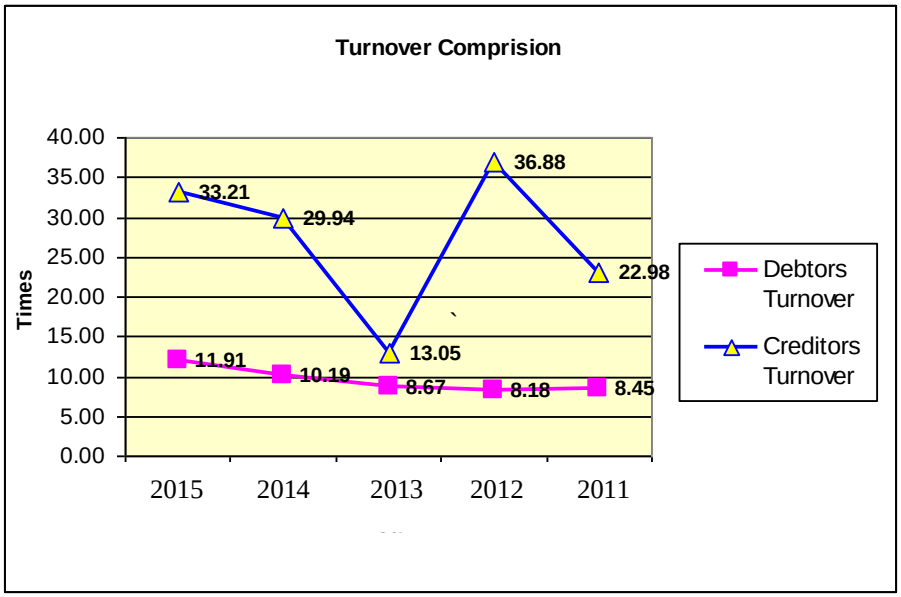
loyalty is perfect than he can claim for the rebate which is around 2%-2.5% of total sales of Crystal's products by the dealer.

4.7 Trade and Other Payable Position of Crystal Paints

There was a mixed trend in trade and account receivables. From 2011 to 2012 it slightly decreased and then in 2013 the amount increased by almost 3 times than 2013. Then in 2015 in becomes 60% of 2013 and was slightly raised in 2014. Crystal is very much reliable to its payables and any third party payment is likely to be paid in a month.

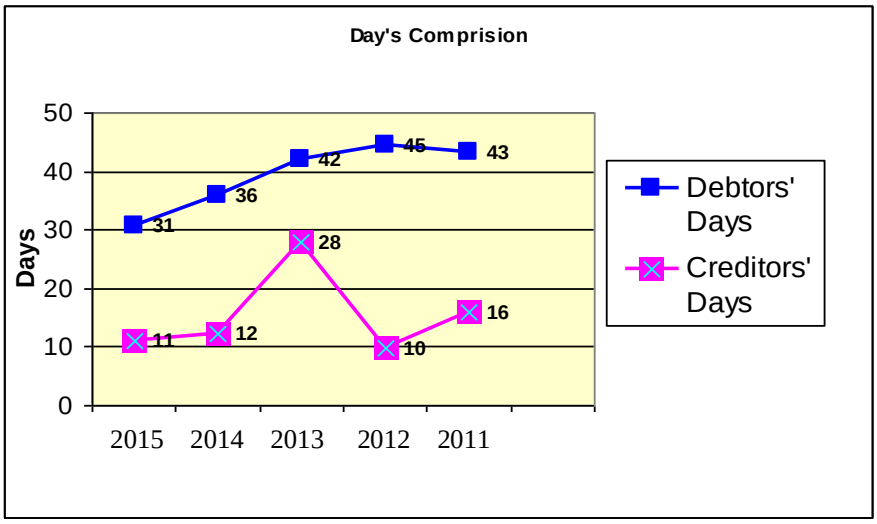
A Comparative Depiction between Receivables and Payables:

In the following graphs we see a comparison between total debtors and creditors' turnover as well as days of crystal composite ltd.



On the above graph it is revealed that Accounts Payables or creditors' turnover is higher than Accounts/ debtors Receivable which not a good sign of efficient working capital management. The accounts payable turnover has a large spikes trend during the period as well as greatly down turn at 2013 because of highly increased in accounts payable in this time. The creditors' turnover has a upward trend gradually which is really a light hope for the organization as efficiency improved.

The same tendency reveals by the following graph.



Here we also observe that debtors' days that are average collection periods from debtors are declining gradually which is a likely development for the company.

4.8 Bank Drafts and Short Term Loan Position of Crystal Composite Ltd.

Due to increase in dividend payments and other short term need to finance the working capital operation the Bank draft and Loans are increasing year by year from 2013.

For short-term loans, banks provide money against any current assets. 'Inventories' or 'accounts receivables' may secure the loans. Crystal is used to take loan against inventory. It is of two types – pledge and hypothecation. Incase of pledge the materials will be in the Bank's warehouse and the company can use those materials only by paying the loan. In hypothecation, the materials will be in the company's godown and they can use those but at any given time the materials should not be less that the secured amount. Company can get loan from more than one Bank but sum of the secured materials should not be greater than the amount available in the factory.

4.9 Cash Conversion Cycle between Crystal Composite Ltd.

To calculate CCC, we need several items from the financial statements:

- Revenue and cost of goods sold (COGS) from the income statement
- Inventory at the beginning and end of the time period
- AR at the beginning and end of the time period

- AP at the beginning and end of the time period
- The number of days in the period (year = 365 days, quarter = 90)

Inventory, AR and AP are found on two different balance sheets. If the period is a quarter, then use the balance sheets for the quarter in question and the ones from the preceding period. For a period of a year, use the balance sheets for the quarter (or year end) in question and the one from the same quarter a year earlier.

This is because, while the income statement covers everything that happened over a certain period of time, balance sheets are only snapshots of what the company was like at a particular moment in time. For things like AP, you want an average over the period of time you are investigating, which means that AP from both the time period's end and beginning are needed for the calculation.

Now that you have some background on what goes into calculating CCC, let's take a look at the formula:

CCC = DIO + DSO - DPO

Let's look at each component and how it relates to the business activities discussed above. Here I've taken 2014 and 2015 in focus:

Days Inventory Outstanding (DIO): This addresses the question of how many days it takes to sell the entire inventory. The smaller this number is the better.

For crystal composite ltd

DIO = Average inventory*/COGS per day

= [{(427,690 + 353,001)/2}/ (1,928,861/365)]

= 390345.5 / 5284.55

= 73.87 days

[*Average Inventory = (beginning inventory + ending inventory)/2]

Days Sales Outstanding (DSO): This looks at the number of days needed to collect on sales and involves AR. While cash-only sales have a DSO of zero, people do use credit extended by the company, so this number is going to be positive. Again, smaller is better.

For crystal composite ltd

DSO = Average Account Receivables* / Sales Revenue per day

= [{(241,203 + 208,106)/2}/ (2,872,447/365)]

= 224654.5 / 7869.72

= 28.55 days

[*Average AR= (beginning AR + ending AR)/2]

Days Payable Outstanding (DPO): This involves the company's payment of its own bills or AP. If this can be maximized, the company holds onto cash longer, maximizing its investment potential; therefore, a longer DPO is better.

For crystal composite ltd

DPO = Average AP* / COGS per day

= [{(58,082 + 46,499)/2}/ (1,539,078/365)]

= 52290.5 / 4216.65

= 12.4 days

[Average AP* = (beginning AP + ending AP)/2]

Therefore the Cash Conversion Cycle of crystal composite ltd

CCC = (73.87 + 28.55 – 12.4) days = 90.02 days

4.10 Risk factors relating to Working Capital Management of Crystal Composite Ltd.

Risk factors relating to working capital management are discussed below:

WCM Components	Risk Factors Analysis
Cash	▪ Cash balance is decreased year by year ▪ Lack of Enterprise Resource Planning Software to assist and simplify the cash management functions ▪ Increasing administration and promotional cost burns up cash reserves ▪ Lack of implementation of Float Management ▪ Lack of investment in marketable securities which have higher returns than treasury bills or FDR
Account Receivables	▪ Increasing accounts receivables year by year ▪ Increasing Days to sales outstanding year by year ▪ Increasing taxes and vat ▪ Competitors may offer superior rate of discounts and rebates at which Crystal can't avail.
Inventories	▪ Increase in inventory level year by year ▪ Lack of proper inventory management software ▪ Disparity in inventory level in sales required and raw materials consumptions ▪ Increasing insurance and warehousing cost negatively affects cash reserve. ▪ Risk of being outmoded goods ▪ Large amount of Goods-in-transit may often hamper production process due to lack of integration between Supply Chain Department, Factories and Treasury Department. ▪ Lack of focus on more competitive and lucrative products like Power Bond and Industrial paints.
Account Payables	▪ Crystal's Days to Payables Outstanding is very inefficient because it quickly pays their payables which are very low compare to the industry and not competitive. ▪ Crystal's accounts payables are mostly in foreign countries. So buying raw materials adversely affect its cash due to high exchange rate and raw material cost.
Short Term loans	▪ Crystal pledges its stocks to obtain Short term loan which reduces its inventory level.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.1 Summary

The working capital ratio is a key figure in financial management. It characterizes how much financial funds are required by short term, operating activities. The calculation of working capital functions are as so; Inventory + Trade Receivables – Trade Liabilities. The core objective is maintaining the lowest working capital as possible in order to reduce financial responsibility, without endangering the ability to operate the business. Furthermore the reduced working capital forces efficiency of invested capital, releases cash from balance sheets and improves balance-sheet-structures has been found that. "Crystal Composite Limited" following conservative working capital management policy and improve its working capital policy. The ratio of working capital efficiency of sales ratio in 2015, 2014, 2013, 2012 is respectively 9.89%, 3.19%, 4.51%, 1.22% and Working Capital Turnover is 10.11%, 31.41%, 22.17%, 82.10%.

5.2 Conclusion

Working capital management plays a significant role in better performance of business entities. Working capital management involves the management of the most liquid resources of the firm which includes cash and cash equivalents, Inventories and trade, account receivables, account payable, accrual, short term financing, cash conversion cycle, working capital policies. This study analyzes the influence of working capital management of "*Crystal Composite Limited*". It is a leading garments firm in Bangladesh.

The industry at present is passing through buyers phase of the market. This state of Garment industry is expected to continue in near future too because new capacity is being created faster than growth in demand. This has increased competition and working capital management has become more difficult. On the one side customers have to be accommodated to compete in the market but at the same time all possible economies must be achieved in management of cash, receivables and inventory to maintain and improve profitability.

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