



INTERNATIONAL RESEARCH JOURNAL ON ADVANCED SCIENCE HUB

e-ISSN : 2582 - 4376
Open Access

RSP SCIENCE HUB

(The Hub of Research Ideas)

Available online at www.rspsciencehub.com

Special Issue of First International Conference on Management, Science and Technology (ICMST 2021)

Cash Conversion Cycle of food and beverage Product industry

Dr. S. Vijayalakshmi¹, Arpanaa. S²

¹Head, Department of B. Com (PA), PSGR Krishnammal College for Women, Coimbatore. India.

²B. Com (PA). PSGR Krishnammal College for Women, Coimbatore. India.

arpanaapremanandhi@gmail.com²

Abstract

Working capital is significant because of the effects it has on profitability and value. The conventional relationship between the cash conversion cycle and firm profitability is that reducing the cash conversion cycle improves firm profitability. Shortening the cash conversion time, on the other hand, can hurt the firm's operations and reduce profitability. This may occur when a firm takes steps to shorten the inventory conversion time; when a firm reduces the receivable settlement period, a firm could lose its good credit customers; and when a firm lengthens the payable deferral period, a firm may damage its own credit credibility. Identifying optimum levels of inventory, receivables, and payables where net keeping and opportunity costs are reduced and recalculating the cash turnover time based on these optimal stages, on the other hand, gives more full and precise insights into the performance of working capital management. According to the findings, the chosen firms have a poor average return on asset and return on equity, as well as a slightly negative cash conversion time. After adjusting for heteroskedasticity of data to minimise the effects of outliers, regression results revealed that cash conversion cycle has a significantly positive association with both return on assets and equity, indicating that it is not always necessary that the lower the cash conversion cycle, the greater the profitability measured through return on assets and equity. If the company will sell the goods and recover the receivables before paying the payables, the case would be somewhat different.

Keywords: Working capital, Profitability, Current assets, Current liabilities, CCC.

1. Introduction

Working capital is needed for the day-to-day operations of a company. It is money used to manage short-term assets including currency, inventories, receivables, marketable securities, and so on. A company's net working capital is the surplus of its short-term investments against its existing liabilities. It is a means of long-term funding for handling short-term properties. Working capital is a financial yardstick that measures a company's liquidity and represents its short-term financial stability. It is widely accepted that effective WCM raises returns while decreasing net operating assets and resources employed, resulting

in an improvement in financial efficiency at a constant cost of capital. The WCM idea is based on the conventional patterns of the CCC that is commenced by Richards and Laughlin (1980). The cash conversion cycle of individual companies, as well as the industry's aggregate cycle, illustrates how the firms are performing; however, it assists in identifying areas where more progress is needed (Hutchison, 2007). WCM's fundamental principles are to reduce capital employed and increase productivity through the usage of currency, inventories, receivables, and payables. Firms can mitigate risk by carefully managing their working resources. The noise WCM plays a critical role in ensuring the optimal size of currency, inventory,

receivables, and payables for the smooth running of different business operations. Working capital management reduces the need for working capital financing while increasing the firm's income and resources. One of the most critical activities for company owners is to forecast and analyse the cash flows of the business, to accurately classify the long run and short run capital inflows and outflows, and to timely figure out cash shortages and excesses to devise funding and spending plans. It also aids in the timely settlement of creditors to prevent losing the reputation and loyalty of consumers and avoiding possible bankruptcy. In general, cash control is dependent on the cash transfer period and is seen as a vital component in improving company efficiency since it demonstrates how effective a company is in its bill payments, invoice processing, and inventory sales. Companies may increase their profitability by shortening the cash exchange time by decreasing or shortening the receivables collection period, decreasing or shortening the inventory sale period, and increasing or shortening the loan settlement period. Since any business company is worried with how to maintain and boost profitability, they must keep an eye on the factors influencing profitability. In this respect, liquidity management, with its effects on corporate costs and returns, cannot be underestimated by these organisations, and therefore the cash exchange period, as a measure of liquidity management, needs to be investigated as to how it can impact the viability of the corporate units. Today, due to the changing global economy, technological advancements, and intensified global competitiveness among businesses, every company is struggling to increase income, and companies are making every effort to get their cash conversion time to an optimal level to increase profitability. This research is concerned with analysing and assessing how improvements in the cash exchange period impact changes in the viability of the chosen Nestle India Limited.

2. Review of Literature

Literature review gives an idea to carry out the study by providing a skeleton for further research. Part of such reviews has existed below:

Manpreet Kaur and Dr. Navitaa Nathani (2017), both made an attempt to examine the comparison of profitability and conversion cycles between the companies. Sample of the 30 firms from the FMCG

sectors listed for 2009-2016. They used descriptive studies including mean, SD and ratio, regression analysis as the tool of this study. This analysis indicates the variables of the currency exchange cycle and the variable of profitability, NPM, ROTTA, ROCE cash conversion and profitability. The study shows that there is a positive link between receivables and the facts about the viability of the business.

Kesseven Padachi (2006), the study focuses on the "Trends in working capital management and its impact on firms' performance". The main objective is to examine the impact of accounts receivables, payables, inventories, and cash conversion cycle on return on total assets. The primary aim of this paper is to investigate the impact of WCM on corporate profitability.[1-4]. **Enukurthi Anil Kumar (2010)**, his study has the only scope to cover HDFC Bank financing services with the help of working capital management. The objective of the study is to know the short-term financial position of the bank and to identify the conceptual framework and theoretical perception. He used the tool, statement showing changes in working capital.[5-8]. It was concluded that when there is an increase or decrease in current ratio there has been an improvement or deterioration of the liquidity position of the company. Working capital management and profitability were found to have a significant positive partnership by **Afza and Nazir (2009)**. **Uyar (2009)** discovered a major correlation and connection between working capital management and liquidity and profitability, concluding that firm size is negatively associated and connected to the cash conversion period, and a negative and oppositely shifting linkage between the cash conversion cycle and profitability was observed. According to Luo et al. (2009), if the firm's valuation rises, the cash loop will shorten. Gill et al. (2010) discovered that if a company keeps its accounts receivable, accounts payable, and inventories at optimal levels, it will make the most benefit.[9-14].

3. Statement of Problem

The difficult nature of managing a company's operating cash is the general business problem. The specific business issue is that some business leaders do not have CCC strategies in place to maintain the necessary cash flow to reduce the risk of business failure. It helps to maintain adequate cash flow to meet short-term goals and obligations.

In Nestle India Limited, the value of liquidity seems to be falling slightly in the recent years, which may affect the profitability of the company. Effectiveness of working capital management is built on the principle of speeding up cash collections as fast as possible and slowing down cash expenditures as slowly as possible. Analyzing the Cash Conversion Cycle (CCC) of the inventories in the firm.

4. Objective of the Study

The study's basic research aim is to examine the current literature on the function of cash conversion period in improving business profitability and to assess the role of cash conversion cycle in understanding differences in the profitability of the chosen company.

5. Methodology

The information is derived from the company's annual reports. Sales, cost of goods sold, receivables, payables, inventory, and operating income are all included in the data. This information is used to calculate the receivable collection period, inventory conversion period, payable deferral period, cash conversion cycle, and operating income to sales ratio. This study covered the years 2015 to 2019.

6. Analysis, Findings and Suggestion

Cash Conversion Cycle (CCC) or Cash Cycle is a period taken by the business firm to convert its inventories and resources into liquid cash flow. The cash conversion cycle is more important for an organization to understand its operational efficiency. Cash cycle relates to the company's working capital management and it is measured in number of days. The main elements of cash conversion cycle are;

- Days Inventory Outstanding (DIO)
- Days Payable Outstanding (DPO)
- Days Sales Outstanding (DSO)

The cash interval is divided into three distinct stages. The first portion of the cycle reflects the company's total inventory volume and the time it would take to sell this inventory. The days inventory remaining formula is used to measure this point. The actual transactions and the time it takes to receive the cash from these sales are reflected in the second stage of the cash cycle. The days revenue remaining estimate is used to measure this.

The remaining unpaid payables are represented in

the third tier. In other words, this shows how much a firm owes its existing suppliers for inventory and goods orders, as well as what the company must pay its vendors. This is determined by calculating the number of days payables outstanding.

Formula for calculating Cash Conversion Cycle,

$$CCC = \text{Days Inventory Outstanding} + \text{Days Sales Outstanding} - \text{Days Payable Outstanding}$$

a. Days Inventory Outstanding (DIO)

Days Inventory Outstanding is the average number of days that a company holds its inventories before selling it. Days Inventory Outstanding is a working capital management ratio.

$$DIO = \text{Average Inventory} / \text{Cost of goods sold} \times 365 \text{ Days}$$

b. Days Sales Outstanding (DSO)

Days Sales Outstanding is the average number of days taken by a company to collect the payment after sales.

$$DSO = \text{Average accounts receivable} / \text{Total credit sales} \times 365 \text{ Days}$$

c. Days Payable Outstanding (DPO)

Days Payable Outstanding is the average time taken by a company to pay its invoices and bills to their trade creditors, vendors, suppliers, or financiers. The higher value of DPO helps the business to utilize the available funds for long duration which maximize the benefits of the firm.

$$DPO = \text{Average accounts payable} / \text{Cost of goods sold} \times 365 \text{ Days}$$

The cash conversion time formula is used to decide how effectively an organisation handles its working capital. The shorter the cash transfer time, as with most cash flow calculations, the better the company is at selling inventories and recovering cash while paying vendors. The cash exchange time can be trended and linked to other firms in the same sector.

For example, comparing a company's migration period to previous years' periods will help decide if its working capital management is worsening or improving. Furthermore, comparing a company's cycle to that of its rivals will assist in evaluating if the company's cash conversion cycle is "natural" in contrast to industry competitors.

The average duration of the cash conversion period varies significantly across sectors, but there is no single statistic that reflects a 'good' or 'bad' cash conversion cycle. However, comparing the CCC of two firms in the same sector may be helpful since a lower CCC can mean that one company manages its

working capital more efficiently than the other. It may also be helpful to watch the CCC of a single organization over time to see if the company is getting effective.

d. Interpretation

From the above table, we calculated Cash Conversion Cycle for the study period. In the year 2015, the CCC was -1797 days, here negative CCC shows that the concern not yet paid for its inventories. The highest number of days was noted in the year 2016 with 1299 days, then it slightly decreases to the lowest of 306 days in the year 2019. Hence, shorter CCC days is more efficient as it turns working capital many times in a year which results increase in profit and sales from working capital.

**Table.1. Calculation of CCC
(In days)**

(Source: Annual report of Nestle India Limited)

YEAR	DIO (1)	DSO (2)	DPO (3)	CCC (1+2-3)
2015	3581.94	3.50	5382.45	-797.00
2016	3392.19	3.91	2097.57	1299.00
2017	3300.18	3.24	2330.36	973.00
2018	3019.02	4.03	2679.81	343.00
2019	3318.18	3.67	3015.86	306.00

6.1 Findings

- ✓ In 2015, the Cash Conversion Cycle of Nestle India Limited was -1797 days. It shows a negative CCC, which means the concern not yet paid for its inventories. This state was faced by the firm due to various controversies raised against Nestle India, such as Maggie ban in the year of 2015.
- ✓ The firm took complete three years for its recovery from the issues. Thus, the firm slowly recovers its position and reaches 306 days of CCC in the year 2019.

6.2 Suggestion

We suggest that the company may take necessary steps to improve its operational efficiency by maintaining the product’s quality and service to

gain its goodwill.

Conclusion

The cash conversion cycle is essential for a manufacturing firm because it assists financial managers in determining the inventory retention time, which is reflected by the cumulative amount of days a company's cash stays blocked in the business activities cycle beginning with the manufacturing of inventory and ending with the sale of that inventory. The cash cycle is an extremely effective instrument for determining how effectively a production company's working capital is handled. Financial administrators must operate industrial firms for a longer period of time, which necessitates decisions to maintain working resources while striking a compromise between available current assets and current liabilities. Furthermore, by properly monitoring the liquidity exchange period, financial management will reduce the likelihood of potential cash shortages and bankruptcy. Nestle India Limited data was gathered and examined over a five-year period from secondary sources.

The significance of this research is to determine the effect of the cash conversion cycle on firm profitability through working capital management. The cash exchange period, which accounts for all money flows associated with inventory, receivables, and payables, is one of the most detailed indicators of working capital management performance. The typical relation between the cash conversion cycle and business profitability and market value is that shortening the cash conversion cycle by reducing the time that cash is locked up in working capital increases firm profitability and market value. This could occur by shortening the product conversion time by packaging and delivering items to consumers more efficiently, shortening the receivable recovery period by speeding up collections, or lengthening the payable deferral period by slowing down payments through suppliers.

Reference

[1]. Manpreet Kaur & Dr. Navitaa Nathani (2017) – “The Relationship between Cash Conversion Cycle and Profitability Analysis of FMCG Industry” PEZZOTTA Journal. Vol. 6, Issue 4, ISSN: 2319-9059, pp. 1-32.
 [2]. Kesseven Padachi (2006) - “Trends in working capital management and its impact on firms”

- performance” International Review of Business Research Papers. Vol. 2(2), pp. 45-58.
- [3]. Enothurthi Anil Kumar (2010) – “A Study on working capital management:with reference to HDFC Ltd.” International Journal of Research in Applied Management, Science & Technology. Vol.2, Issue 3,ISSN: 2455-7331,pp.1-8..
- [4]. Richards, V.D., and Laughlin, E.J., (1980), A Cash Conversion Cycle Approach to Liquidity Analysis, Financial Management, Vol. 9 (1), pp. 32-38.
- [5]. Luo, M.M., Yee Lee, J.J. and Hwang, Y. (2009). Cash Conversion Cycle, Firm Performance and Stock Value, Retrieved from http://www90.homepage.villanova.edu/michael.pagano/ML_CC_C_20090420.pdf
- [6]. Uyar, A. (2009). The Relationship of Cash Conversion Cycle with Firm Size and Profitability: An Empirical Investigation in Turkey. International Research Journal of Finance and Economics, Issue 24
- [7]. Nobanee, Haitham and Al Hajjar, Maryam, Working Capital Management and Firm's Profitability: An Optimal Cash Conversion Cycle, August 13, 2012, Available at SSRN: <http://ssrn.com/abstract=2128662>
- [8]. Soenen LA. Cash conversion cycle and corporate profitability. Journal of Cash Management. 1993; 13: 53-53
- [9]. Dr. Ashok Kumar Panigrahi (2012) - “Impact of working capital management on profitability of ACC LTD” Asian J. Management. Vol. 3, Issue 4, ISSN: 0976- 495X1, pp.210-218.
- [10]. Kushalappa. S & Sharmila Kunder (2012) - “Working capital management in manufacturing industry: A study with reference to selected manufacturing industries in India” International Journal of Research in Computer Application & Management. Vol. 2, Issue 12, ISSN: 2231-1009, pp. 101-106.
- [11]. Nitin J. Untwal (2011) – “Working capital management of Bajaj Auto Ltd. with special reference to Automobile Industry. Vol.1(1), pp: 63-71.
- [12]. <https://economictimes.indiatimes.com/nestle-india->
- [13]. <https://www.nestle.in/>
- [14]. <https://economictimes.indiatimes.com/nestle-india->