

Work of Working Capital Management and Profitability; A Theoretical Approach

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Abstract

Working capital management is a crucial component of financial management and has a direct effect on profitability and liquidity of firms. Moreover, an optimal working capital management positively contributes to the firm's value. The profitability and the efficiency of all sectors in the nation have great impact on the industrial growth of the economy which is primarily achieved through efficient working capital management practices. Both the excess and shortage of working capital are bad for a concern and the firm is required to maintain a satisfactory level of working capital.

Keywords: Working capital, profitability, liquidity

Introduction

In financial management working capital management (W.C.M) is a very sensitive area. The relationship between working capital management and profitability is one that receives considerable attention in the finance literature. Working capital management is significant because it directly influences on liquidity and profitability of firms. While inadequate amount of working capital impairs a firm's liquidity, holding of excess working capital results in the reduction of the profitability (Ghosh&Maji, 2003). Working capital management deals with current assets and current debts. Current assets form large part of total properties of a firm. Extra value of current assets can lead to less than normal investment return. Despite this, firms with low current assets face problems in normal operations procedure. The management of working capital plays an important role in maintaining the financial health of the firm during the normal course of business (Rahman, 2001).

Profit can be considered as a yard stick for measuring the economic efficiency of any business concern and it is generally argued that profit maximization should be the goal of business activities and financial management (Dominic&Philip, 2013). Profitability can also be termed as the rate of return on investment. If there is an unjustifiable over investment in current assets then this would negatively affect the rate of return on investment (Vishnani & Shah, 2007). One of ultimate goals of each firm is to optimize long-term profitability. However, maintaining the liquidity is also an important goal. The problem may arise that long-term profitability through loss of liquidity may create troubles for firms. Thus, these two goals should be gained while a balance between them is built. (Ricci &Vito, 2000).

The impact of working capital management on the profitability of manufacturing firms has attracted the attention of researchers in different countries of the world in recent times. The literature has identified different relationships between WCM and profitability Deloof,(2003); Eljelly, (2004), Kesseven Padachi (2006), Raheman and Nasr (2007) , Gill, Biger and Mathur (2010) have found a negative relationship between WCM and profitability. Further they revealed a negative relationship between liquidity and profitability.

Concepts of working capital

There are two major concepts of working capital

- Gross working capital

- Net working capital

Gross Working Capital

The gross working capital is referred to as working capital and it includes the total current assets of the firms. If the current assets are managed efficiently by the firm then, it gives more growth and can increase the value of the firm in the market.

Net working Capital

Net working capital is the difference between current assets and current liabilities of a trade and financial nature.

Net working capital (NWC) = Current assets - Current liabilities

Profitability

The ability of the company to earn profit can be referred to as the profitability of that company. Profit is determined by deducting expenses from the revenue incurred in generating that revenue. The amount of profit can be a good measure of the performance of a company, So we can use profitability as a measure of the financial performance of a company, as well as, profitability as the promise for a company to remain a going concern in the world of business (Agha, 2014).

Proper Working capital management ensures that the company increases its profitability. Effective working capital management is very important due to its significant effect on profitability of the company and thus, the existence of company in the market. The Management of working capital generally involves three main areas cash management, receivable management and inventory management.

Cash Management

Cash forms the method of collecting revenues and paying various costs and expenses for business. The reasons for holding cash have traditionally been divided into three categories as postulated by Keynes (1935) namely transaction motive, precautionary motive and speculative motive

The firm has to identify the cash balance which allows for the business to meet day to day expenses, but reduces cash holding costs. A firm should hold an optimum balance of cash, and invest any temporary excess amount in short-term (marketable) securities.

CASH CONVERSION CYCLE (CCC)

Generally, cash management is based on cash conversion cycle and is considered as an important factor enhancing the performance of companies, since it shows how efficient a firm is in its payments of bills, collection of payments, and selling of inventory. Companies can enhance their profitability by lessening their length of cash conversion cycle through decreasing or lessening the receivables collection period, decreasing or lessening the inventory selling period and increasing or lengthening the credit payment period.

CCC is used as an overall measure of WC, as it shows the gap between expenditure for purchases and collection of sales (Padachi, 2006). Jordan (2003) defined cash cycle as “the time between cash disbursement and cash collection”

Cash cycle = Operating cycle -Accounts payable period
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Where:

Operating cycle = Inventory period + Accounts receivable period

CCC is a dynamic measurement of the time between cash payment for rawmaterials and receiving it from accounts receivable.

CCC is a great measure to know that how fine a corporation is in organizing its working capital.(Nobanee ,Abdullatif, & AlHajjar 2011). It measures the time it takes to convert cash into cash again from the time when inventory is bought till the time inventory is sold and the bills are recovered (Padachi, 2006). Richards and Laughlin (1980) presented the idea of cash conversion cycle as a tool for measuring the liquidity management and performance of a company. Schilling (1996) proved that the increase in cash conversion cycle increases the minimum liquidity requirements of the business organizations and similarly decrease in cash conversion cycle decreases the minimum liquidity requirements of the business organizations.

Receivable Management

Management of trade credit is commonly known as Management of Receivables. Receivables are one of the three primary components of working capital, the other being inventory and cash. Accounts receivable is the money owed to a company as a result of having sold its products to customers on credit. The primary determinants of the company's investment in accounts receivable are the industry, the level of total sales along with the company's credit and collection polices. Accounts receivable management includes establishing credit and collections policy.

According to Anthony (1980), "Accounts receivables are amounts owed to the business enterprise, usually by its customers. Sometimes it is broken down into trade accounts receivables; the former refers to amounts owed by customers, and the latter refers to amounts owed by employees and others". In managing accounts receivable, the following procedures are recommended establish a credit policy, establish a policy concerning billing and establish a policy concerning collection.

It was found that bills of receivables constituted as much as 50% of total current assets. Khandelwal(1985) found that the management of receivables particularly was highly unplanned and ineffective, which resulted in unpredicted cash inflows and huge amount of bad debts. The study strongly recommended urgent action to avoid further.

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. 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. According to Kotler (2000), inventory manage- ment refers to all the activities involved in developing and managing the inventory levels of raw materials, semi-finished materials (work-in-progress) and finished goods so that adequate supplies are available and the costs of over or under stocks are low.

There are three basic reasons for keeping an inventory:

a. 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"

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

c. 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.

Inventory Model: The Economic Order Quantity (EOQ) Model

The model was developed by Ford W. Harris in 1913; undoubtedly, the best-known and most fundamental inventory decision model is the Economic Order Quantity Model. The purpose of using the EOQ model in this research is to find out the particular quantity, which minimize total inventory costs that are the total ordering and carrying costs.

One of the major inventory management problems to be resolved is how much inventory should be added when inventory is replenished. These problems are called order quantity problems, and the task is to determine the optimum or economic order quantity (EOQ). Determining this EOQ involves two types of costs:

Ordering Costs is the cost incurred for requisition, placing of order, transportation, receiving, inspecting and storing and clerical and staff services. Ordering costs are fixed per order. Therefore, they decline as the order size increases.

Carrying Costs is the cost incurred for warehousing, handling, clerical and staff services, insurance and taxes. Carrying costs vary with inventory holding. As order size increases, average inventory holding increases and therefore, the carrying costs increase.

The firm should minimize the total cost (ordering plus carrying). The economic order quantity (EOQ) of inventory will occur at a point where the total cost is minimum. The following formula can be used to determine EOQ:

$$EOQ=Q^*=\sqrt{2A/C}$$

Where A is the annual requirement, O is the per order cost, and C is the per unit carrying cost. The economic order level of inventory, Q^* , represents maximum operating profit, but it is not optimum inventory policy.

Inventory Control System

A firm needs an inventory control system to effectively manage its inventory. There are several inventory control systems in practice. They range from simple systems to very complicated systems. The nature of the business and the size dictates the choice of an inventory control system. Some of these systems are:

A-B-C Analysis

A-B-C Analysis A firm, which carries a number of items in inventory that differ in value, can follow a selective control system. A selective control system, such as the A-B-C analysis, classifies inventories into three categories according to the value of items: A-category consists of highest value items, B-category consists of high value items and C-category consists of lowest value items. More categories of inventories can also be created. Tight control may be applied for high-value items and relatively loose control for low value items.

Just-In-Time (JIT) System

Japanese firms popularized the Just-In-Time (JIT) system. In a JIT system materials or manufactured components and parts arrive to the manufacturing sites or stores just few hours before put to use. The delivery of material is synchronized with the manufacturing cycle and speed. JIT system eliminates the necessity of carrying large inventory and

thus, saves carrying and other related costs. The system requires perfect understanding and coordination between manufacturer and supplier in terms of timing of delivery and quality of material.

Conclusion

The efficient management of working capital is vital for the growth and survival of a business and thus, a factor for overall boost in profitability. The three basic components of working capital management are Cash management, Receivable Management, Inventory management and an examination of these components of WCM is helpful because of the preoccupation of the management with the proper combination of assets and acquired funds. Much academic literature is of the opinion that Profitability was positively correlated with average collection period and average payment period but negatively correlated with CCC. So the management should focus on reducing CCC and try to collect receivables as soon as possible.

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