# **Working Capital Management and Financial** Performance: An Analysis of Trading Firms

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#### **Abstract**

A Working capital management ensures a company has sufficient cash flow in order to meet its shortterm debt obligations and operating expenses. The needs of efficient working capital management must be considered in relation to other aspects of the firms' financial and non-financial performance. An efficient Working Capital Management is expected to contribute to the high financial performance. The main purpose of this study was to investigate the working capital management and its impact on firms' financial performance.

The efficiency of working capital management was investigated through the cash conversion cycle. The research problem focused here — what extent the working capital management influences on financial performance of the trading firms? — a strong significant relationship between working capital management and profitability has been identified in previous research. It was assumed that — the efficient working capital management has strong impact on financial performance.

The dependent variable Return on Assets is used as a measure of profitability of financial performance and its' relationship with working capital management was investigated to find out the results. Samples of 9 trading firms have been selected from the companies listed by the Colombo stock exchange using Statistical Package for Social Sciences (SPSS) for the period of 2004 to 2009 to find out the results.

The regression analysis results show that the high investment in inventories and receivables is associated with lower financial performance (ROA). For this analysis the inventories days, accounts receivable days, accounts payable days and cash operating cycle have been used. The findings also revealed that some firms have efficient working capital management and some have inefficient working capital management in the trends of working capital according to the cash operating cycle.

**Keywords:** Working Capital management, financial performance, Accounts receivable, Accounts payable, cash operating cycle.

#### Introduction

Financial management plays an important role in management activities of corporations. Financial management activities help to ensure capital for enterprises, to take measures so as to elevate operation efficiency and to control the business operation of firms. The contents of financial

management include long- term investment decisions, financing decisions, short-term financial decisions (or working capital management), and many other decisions such as repurchase and mergence, repurchase of company's shares.

Working capital measures a company's efficiency and represents the liquid assets that are available with a firm. It also indicates firm's short term financial health and its capacity to meet day-to-day operating expense. Thus, working capital management has a significant impact on firm performance. However, in practice, for Vietnamese enterprises, how to manage working capital efficiently is still a problem. Therefore, it is important to quantify the relationship between working capital management and firm performance. From that point, the managers will have concrete and accurate foundations to manage working capital of their firms.

The purpose of this study is to analyze the impact of working capital management on the financial performance of firms on Ho Chi Minh Stock Exchange (HOSE) in the period of 2014 to 2016. This research contributes another study on working capital management in the world, especially in a developing country. It also helps managers make suitable decision on working capital management in order to elevate their fir performance.

## **Literature Review**

It is proven by many empirical studies that the performance of firms can be influenced by many Financial management plays an important role in management activities of corporations. Financial management activities help to ensure capital for enterprises, to take measures so as to elevate operation efficiency and to control the business operation of firms. he contents of financial management include long-term investment decisions, financing decisions, short-term financial decisions (or working capital management), and many other decisions such as repurchase and mergence, repurchase of company's shares.

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# Methodology

The study analyse the Efficiency index of SME companies that was listed with SME Corporation of Chennai. A sample of 50 companies was retrieved from database for the period from 2009 to 2013. However only 24 companies was selected for analysis and the rest is omitted due to lack of required information. The data is extract based on the income statement and balance sheet from the annual report of the company. For the measurement of WCM Efficiency, this study adopted the index develop by Bhattacharya (1997). Bhattacharya developed another tools for the measurement and examining the efficiency of the working capital management due to obstacles during implementation of the accounting ratios, such as lack of data and difficult task due to the missing theory (Bhattacharya, 1997).

Traditionally, based on the previous studies it shows that accounting ratios are the most important tools to measure the efficiency. Nonetheless, Bhattacharya (1997) has composed an index, known as total efficiency index of the working capital management that was develop from the performance index, and utilization index. This study differentiated from the previous study by using the Index based on sample that was never been tested previously from Malaysia perspective. Basically, this current study undertakes Small Medium and Enterprise industry as a sample and chooses 24 companies in Chennai as a preliminary test to measure the efficiency. The index used by Bhattacharya was based on sample of bigger company and presumably small firms and large firms are different from each other and the responsiveness of proficient working capital management is still unclear (Javid ,2014) thus motivated the current study to apply this index. Bhattacharya (1997) suggest that to measure the whole efficiency of the working capital management, the first analysis was to calculate the Performance Index of Working Capital Management (PIWCM) using the following model;

Where,

(1)

1 n i s i it WCM/W t/W/PI

 $N \square \square$ 

(1) Is= Sales index defined as: St / St-1,

Wi= Individual group of current assets

N= Number of current assets group

And, i = 1, 2, 3...N

Secondly, to examine utilization Index of working capital management (UIWCM), the following model was used;

1 WCM/t/tAA

*UI* / □ **(2)** 

Where, A = Current assets / Sales

The model was used to indicate the ability of the firm to utilizing the currents assets of the purpose of generating income. In this study, the number of current assets group was divided into five different items namely inventories, account receivable, CAS and tax recoverable, fixed deposits and other current assets. Lastly, Bhattacharya (1997) developed the following model to examine the efficiency index of working capital management (EIWCM) which was constructed by multiplying the Performance Index with Utilisation Index.;

 $EIWCM = PIWCM \times UIWCM$ 

## **Discussion and Results**

The descriptive analysis of selected small medium enterprise company for Performance Index (PIWCM), Utilization Index (UIWCM) and Efficiency Index (EIWCM) of working capital management. PIWCM shows the average performance index of the various items in current asset, UIWCM defines as the ability of company to generate sales by utilize the current asset and EIWCM is a calculation of performance that consists of PIWCM and UIWCM.

## **Performance Index, PIWCM**

Generally, performance index that greater than 1 shows the working capital management are properly managed. The results for PIWCM on the table 1 depicted that the selected sample of SME companies are less efficient in managing the working capital. Throughout the years from 2010 - 2013, only Chong San Industries is effectively managing the company's working capital with index point of 1.31 (> 1). The rest didn't compatible yet to manage the current assets as whole during the period of study. The results of PIWCM for most of the selected sample are more than 1(<1) indicating that the sales generated by the companies was less than the amount of Working Capital used.

## **Utilization Index, UIWCM**

The UIWCM indicates the degree of utilization of current assets of a company. Any increase in current assets that was substantiate with an increase in the sales representing an effective utilization of currents assets. As per table 1, its shows that, most of the selected company, which are, 17 out of 24 companies' marks that they utilized their current assets efficiently. The results are greater than 1, which are the benchmarks for measurement of efficiency.

# **Efficiency Index, EIWCM**

Efficiency index is a measurement of ultimate efficiency level since this index is from performance and utilization index. Based on table 1, the results show that selected companies in SME Malaysia have a poor efficiency level of working capital management's since the results was less than 1. In this study, the poor levels of efficiency index are influenced by the poor performance index. The result thus implies that the selected SME Company does not effectively utilize its working capital in generating the sales.

As per overall observation, the indexes of the efficiency by selected SME Company's shows poor level of efficiency in in managing their working capital. In the performance index, only Chong San Industries indicates effective management of current assets. This company is from the food and beverages industry and their main products were sugar confectionery. For the utilization index, most of the company remarkably fully utilized the current assets to generate more sales.

The most efficient company within the 24 selected companies is ( $\mu$ =0.2203). Last index is Efficiency index which is ultimate efficiency level that multiple by performance and utilization index. The results show that has the highest mean, which is,  $\mu$ =0.2203 and it indicates that within this sample, this companies performance well rather than other. The most inefficient management of working capital with  $\mu$ =0.1341. Both of this company from different industry. The food and beverages that fall under services sector have better performance rather than manufacturing, but both sector are well perform to utilize their assets. Efficiency index reveal that manufacturing sector is the most efficient sector in managing the current assets and fully utilize their assets in order to create more efficient working capital management.

## **Conclusion**

The present study attempt to analyse the efficiency of working capital management in the selected small medium enterprise companies from year 2010 to 2013. The efficiency was represents by total efficiency index of the working capital management based on the performance index, and utilization index instead of using the calculate working capital management ratio. For preliminary analysis, this study only analysed a sample of 24 SMEs listed in due to incomplete information provided by most of the selected sample. The results should be more than 1 to determine the performance, utilization and efficiency level. Performance index of

the company is not up to expectation due to the results of the index is less than 1. Only one out of twenty four companies have value greater than 1.

However, the utilization index is very good during this study period. Most of the company results greater than 1, and its show how well the companies utilize the current assets. For the efficiency index, the results show that the selected SME companies are less concern with their working capital management since the value is less than 1. Empirical results revealed that the selected small medium enterprise companies are less efficient in managing their working capital during this study period. The management of working capital plays important roles to ensure the sustainability of the company in maintaining the business with an increase performance.

The improper management of working capital will results on the inefficient asset utilization and the investment for the short term will be decrease. In addition, the company wills loss a lot of opportunities to expand the business since they will suffer short-term liquidity crisis and downgrading the company's rating. The address results could provide alarming signals towards SME industry in Chennai since inefficient management of working capital could become a major cause of SME failure. Though, given the government's move to put greater emphasis on the development of SMEs as one of the catalysts of resilient national Economy, thus this preliminary study has open up a new direction towards working capital literature in Chennai. A deepen analysis in measuring the factors that might influence the efficient management of working capital across a larger sample of SME in Chennai is vital. Future research will highlight these issues by taken into consideration a larger sample to represents a wider perspective towards SME in Chennai particularly with a longer years observation. Thus this study is left for future to be further explored.

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