

WORKING CAPITAL MANAGEMENT AND PROFITABILITY: A STUDY OF TRADING COMPANIES IN SRILANKA.

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Abstract

Working capital management plays a significant role in better profitability of trading firms. This paper analyzes the impact of working capital management on firm's profitability in Srilanka for the period 2005 to 2009. For this purpose, collecting data of twenty trading firms is used which are listed on Colombo Stock Exchange.

The results indicate that the cash conversion cycle, net trade cycle and inventory turnover in days are significantly affecting the profitability of the firms. The trading firms are in general facing problems with their collection and payment policies. Moreover, the financial leverage, sales growth and firm size also have significant effect on the firm's profitability. The study also concludes that firms in Srilanka are following traditional working capital management policy and the firms are needed to concentrate and improve their collection and payment policy. The effective policies must be formulated for the individual components of working capital. Furthermore, efficient Management and financing of working capital (current assets and current liabilities) can increase the operating profitability of trading firms. For efficient working capital management, specialized persons in the fields of finance should be hired by the firms for expert advice on working capital management in the trading sector.

Key words: Working Capital Management, Average Collection Period, Average Payment Period, firm size

1. INTRODUCTION

Working capital management (WCM) involves the relationship between a firm's short-term assets and its short-term liabilities. The basic goal of WCM is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short-term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivable, accounts payable and cash

Management of working capital is one of the most important aspects of firm's profitability. Analyzing the financial statement of the firm helps to make proper decisions about the strengths and weakness of the firm's operations. These statements are useful in analysis of the profitability of the company by analyzing each individual element to the total figure of the statement.

In Sri Lanka, selected all listed companies are divided as the sectors by

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Colombo Stock Exchange (SE) . Here researcher considers Impact of working capital management on profitability of the five firms in trading industry in listed companies and do research based on the five years data between the 2005-2009

2. LITERATURE REVIEW

Every Business needs funds for two purposes- for its establishment and to carry out its day to day operations. Long term funds are required to create production facilities through purchase of fixed assets such as plant and machinery etc. Funds are also needed for short term purpose for the purchase of raw materials, payment of wages and other day today expenses etc.

In the words of shubin, "working capital is the amount of funds necessary to cover the cost of operating enterprise" Pandy & Perera (1997) suggested that The managing director plays a major role in formulating formal or informal policy. Company size has an influence on the overall working capital policy (formal or informal) and approach (conservative, and moderate or aggressive) Finance manager is the responsible for managing working and review period. Capital components. Stretching of credit payment and ageing schedule are the primary tools of managing disbursement float and controlling debtors respectively. Company profitability has an influence on the methods of working capital planning and control. Companies sometimes consider working capital changes when they evaluate capital budgeting. Most of the companies in this study use bank interest rate as a hurdle rate for evaluating the working a comparison of the working capital

practices of the SriLanka Capital changes. SriLankan companies with the USA companies reveals a lot for similarities. The basic difference is in terms of the use of computerized system and the opportunity to invest surplus cash in the money market instruments.

Herbert. Weinraub and Sue Visscher [1998] found that there is a high and significant negative correlation between industry asset and liability policies. Relatively aggressive working capital asset management seems balanced by relatively conservative working capital financial management. The study undertaken by Peel and others [2000] revealed that small firms tend to have a relatively high proportion of current assets, less liquidity, exhibit volatile cash flows, and a high reliance on short-term debt. Jain and Kumar (1999) examined and compared that current liability management practice of select companies in India and South-East Asia (SEA) . Accounts payable, short-term loans and advances, were found to be the two major ingredients of total current liabilities. Further, the majority of the sample companies in India and SEA indicated that suppliers offered cash discount facility for prompt payment. Most of the sample companies from India, Singapore and Malaysia did not seem to use any 'manual' for WCM The length of operating cycle had been stated as the basis of working capital determination in India, while, percentage of budgeted production/sales had been ranked as the primary basis in Singapore and Malaysia for that purpose. They also revealed that the majority of the sample companies in India, Singapore and Malaysia had experienced

occasional shortage as well as surplus of working capital.

Filbeck and Krueger [2005] said that business success heavily depends on the ability of financial executives to effectively manage receivables, inventory and payables. Sayaduzzaman [2006] found that the efficiency of working capital management of British American Tobacco Bangladesh Company Ltd. is highly satisfactory due to the positive cash in flows, planned approach in managing the major elements of working capital. Applications of multi-dimensional models of current assets mix may have positive impact on the continuous growth & development of this multinational enterprise. This depends on co-operation of the stakeholders and business environment in the context of globalization.

Appuhami, Ranjith (2008) found that firms' capital expenditure has a significant impact on WCM. The study also found that the firms' operating cash flow, which was recognized as a control variable, has a significant relationship with WCM.. Pradeep Singh (2008) Found that the size of inventory directly affects working capital and its management. Size of the inventory and working capital of Indian Farmers Fertilizer Cooperative Limited (IFFCO) is properly managed and controlled compared to National Fertilizer Ltd. (NFL).

Jed.DeVaro, (2004) suggested that team production does in fact improve Financial performance for the typical establishment but that self-managed or autonomous teams do no better than closely

supervised or non-autonomous teams. It also finds that the magnitude of benefits to establishments that are helped by teams far exceeds the magnitude of costs to establishments that are hurt by teams. Finally, this study finds two interesting patterns of correlations among the unobserved determinants of teams, autonomy, and financial performance. First, unobserved factors that increase the propensity to engage in teams are positively correlated with unobserved determinants of financial performance. Second, unobserved factors that increase the propensity to grant teams autonomy are negatively correlated with unobserved determinants of financial performance when teams are used.

WCM is of particular importance to the firms. With limited access to the long-term capital markets, firms tend to rely more heavily on owner financing, trade credit and short-term bank loans to finance their needed investment in cash, accounts receivable and inventory. Therefore there is significant relationship between working capital and financial performance of the firms. Studies in the UK and the US have shown that weak financial management particularly poor working capital management and inadequate long-term financial- is a primary cause of failure of business.

Later on, Deloof (2003) analyzed that large Belgian firms and the results confirmed that by reducing the inventories and average collection period the Belgian firms could improve profitability. Deloof. (2003) suggested that managers can increase corporate profitability by reducing

It is evident from the table 2 the correlation coefficient between Net profit ratio and ICP is (-) 0.653. It indicates that there is a higher degree of negative association between profitability and working capital ratio of company. The value of the correlation coefficient is found to be significant at 5 percent level. Similarly the correlation coefficient between net profit ratio and DCP is (+) 0.230. It reveals that there is a lower degree of positive correlation between the two variables. It is evident from these two ratios that the amount of current and liquid assets increases risk as well as profitability.

Thirdly, the coefficient of correlation between Net profit ratio and CCP is (-) 0.244. It implies that there is lower

degree of negative correlation between the two variables. Fourthly, the coefficient of correlation between CCC and Net profit ratio is (-) 0.239. It reflects a lower degree of negative association between the two variables.

7.2 Impact of working capital ratios on profitability

Simple Regression Analysis

Simple regression technique has been applied and impact of working capital on profitability of the trading firms. The pooled regression results of the models exhibiting the impact of working capital on profitability of the trading firms are presented in table III

Table 3 : Simple regression analyzing

| Dependent variable : NPR | | | | |
|--------------------------|----------|------------------------|-------|-------|
| Variable | Constant | Regression coefficient | R2 | Sig |
| ICP | 10.941 | -0.114 | 0.427 | 0.029 |
| DCP | 0.079 | 0.043 | 0.531 | 0.049 |
| CCP | 6.253 | -0.071 | 0.593 | 0.470 |
| CCC | 7.155 | -0.035 | 0.571 | 0.022 |
| Dependent variable: ROCE | | | | |
| ICP | 22.014 | -0.169 | 0.155 | 0.023 |
| DCP | 27.301 | -0.209 | 0.209 | 0.015 |
| CCP | 33.186 | -0.559 | 0.613 | 0.004 |
| CCC | 22.357 | -0.108 | 0.544 | 0.041 |

The above table exhibiting the relationship between the dependent variable NPR, ROCE[y] and independent variable ICP, DCP, CCP and CCC [x] taken together and impact of that independent variable on the profitability of firms.

- 1) $y = a + bx$. $Y = 10.941 + -0.114 x$.
According to the above equation, If ICP increases by 1 net profit will reduce by 0.114 which was significantly. In the above model $r^2 = 0.427$. Thus, this statistic tells that 42% of the variation in the net profit is determined by in the variation in the ICP. The remaining 58% is undetermined. This means the 58% of variation net profit may be caused by other variables.
- 2) DCP increases by 1 net profit would increase by 0.043 which was significant at 0.05 level. In the above model $r^2 = 0.053$. Thus, this statistic tells that 53% of the variation in the net profit is determined by in the variation in the ICP. The remaining 47% is undetermined. This means the 47% of variation net profit may be caused by other variables.
- 3) CCP increases by 1 net profit would reduce by 0.071 which was insignificant. In the above model $r^2 = 0.059$. Thus, this statistic tells that 59% of the variation in the net profit is determined by in the variation in the ICP. The remaining 41% is undetermined.
- 4) If CCC increases by 1 net profit will reduce by 0.035 which was significantly. In the above model $r^2 = 0.057$. Thus, this statistic tells that 57% of the variation in the net profit is determined by in the variation in the

ICP. The remaining 43% is undetermined. This means the 43% of variation net profit may be caused by other variables.

- 5) $y = a + bx$. $Y = 22.014 + -0.169 x$.
According to the above equation, If ICP increases by 1 ROCE would reduce by 0.169 which was significantly. In the above model $r^2 = 0.155$. Thus, this statistic tells that 15% of the variation in the net profit is determined by in the variation in the ICP. The remaining 85% is undetermined.
- 6) If DCP increases by 1 net profit will reduce by 0.209 which was significantly. In the above model $r^2 = 0.209$. Thus, this statistic tells that 21% of the variation in the net profit is determined by in the variation in the ICP. The remaining 79% is undetermined. This means the 79% of variation net profit may be caused by other variables.
- 7) CCP increases by 1 net profit would reduce by 0.559 which was significantly. In the above model $r^2 = 0.613$ Thus, this statistic tells that 61% of the variation in the net profit is determined by in the variation in the ICP. The remaining 39% is undetermined. This means the 39% of variation net profit may be caused by other variables.
- 8) CCC increases by 1 net profit would reduce by 0.108 which was significantly at 0.05 level. In the above model $r^2 = 0.540$. Thus, this statistic tells that 54% of the variation in the net profit is determined by in the variation in the ICP. The remaining 46% is undetermined.

7. RESULTS AND DISCUSSION

Trading firms have adequate working capital that means it is near the industry average in last five years. Singer Company has larger amount of working capital in the trading industry.

Most of the trading firms have positive ROCE and net profit. But ROCE is greater than NPR. Further current ratio at least 2 -1 should be expected. Here trading firms has enough current ratios in order to maintain their working capital in adequate level.

According to the multiple regression analysis value between working capital and profitability, 61% of change in profitability is accounted by the working capital. The remaining 39% is undetermined. This means the 39% of variation profitability of trading firms in Srilanka may be caused by other variables.

The composition of working capital depends on not only ICP, DCP, CCP and CCC but also multiple of factors, such as operating level, level of operational efficiency, technology used and nature of the industry.

7.1 Testing of hypothesis

In this session, the following hypotheses are formulated for research purpose based on the result on the analysis part.

H1:- There is significant relationship between working capital management and profitability.

There are mostly negative correlations between ICP, DCP, CCP and CCC and NPR, ROCE. It means that if ICP, DCP, CCP reduce larger amount of working capital appear in the trading firms. So when working capital increases profitability of trading firms will increase. At the same time, In simple regression model the r value of 0.544 explains, that is 54% of variation of profitability is accounted by working capital and In multiple regression model the r value of 0.613 explains, that is 61% of change in profitability is attributed by working capital. At the same time ICP, DCP, CCP and CCC (dependent variables) are statistically at 0.05 significant level. Significant relationship between working capital and profitability is found. So H1 hypothesis is accepted.

In this study, all firms are selected from trading industry. Current assets are different level between trading firms. So firms should maintain current assets to their requirements. If not, excess assets are idle funds which earn no profits for the firms. If suddenly, some surplus funds arise, they should not be allowed to remain idle but should be invested in short term securities.

Current liabilities are different level in firms to firms. Current ratio is different level in firms to firms. It is high or low in firms to firms, and it is compared with the industry average of current ratio. So, firms are faced inadequate or excess working capital and low profitability.

Liquid ratio is different level in the firms. And low value compared with standard (1:1). Here liquidity ratio of firms

may really be prospering and paying its current obligation in time.

8 SUGGESTIONS

In this study, current assets should be managed as fixed assets are managed. The organization should finance in the current assets too, because to bear the increment of activities under developed organization. Further firms have maintain short period the cycle. That is, they should activate the better plan on working capital.

Higher flexible for credit facility will create the highest customer, strict credit policy the loose their customers. It should be determined based on the nature of the firms. Firm's ability to meet its current obligation is satisfactory through it does not meet the conventional norm. These manufacturing firms maintain excess or inadequate working capital.

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