

Trends in working capital management and its impact on firms' performance : An analysis of Sri Lankan small and medium enterprises

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ABSTRACT

A well designed and implemented working capital management is expected to contribute positively to the creation of a firm's value. The purpose of this paper is to examine the trends in working capital management and its impact on firms' performance. The trend in working capital needs and profitability, liquidity, solvency and value added of firms are examined to identify the causes for any significant differences between the industries. The dependent variables of working capital strategy, profits, liquidity, solvency and value added appropriately measured is used to investigate the status quo of a sample of 25 small and medium enterprises, using panel data analysis for the period 2009 – 2012. The correlation results show that: high levels of short term finance is positively associated with financial risk levels: the hardcore working capital extent also reflects positive relations with the cash conversion cycle whilst both profitability and solvency states records positively to the value added quantum. The regression results 'all sectors' shows that high profitability and solvency states are associated with higher levels of value added and dividends. The key variables used in this analysis are value added, dividend and earnings per share, net assets and return on investment. Strong significant relationships between the stipulated variables have also been found in previous empirical work. No hidden champions of best practice were evident within the industries. The findings also reveal an increasing trend in the short term component of working capital financing.

1. Introduction

A firm is required to maintain a balance between liquidity and profitability during the course of their day to day operations. For small and medium enterprises (SMEs) liquidity is a precondition for meeting short term obligations whilst its continued flow can be more or less guaranteed from a profitable venture. The crucial role played by cash enables it to be designated as an

indicator of continuing financial health. This requires that a business must be run both efficiently and profitably. In the process an asset liability mismatch may also arise generating short term profits back to back at a risk of a firm's insolvency. Alternatively too much focus on liquidity will invariably be at the expense of profitability. Accordingly Gitman (1984) and Bhattacharya (2001) discuss and attach priority to the classic

working capital related phenomenon of the risk and return 'trade off' inherent in alternative working capital financing policies, management methods and strategies. Thus, the Manager of a business entity is in a dilemma of achieving desired trade-off between liquidity and profitability in order to maximize the value of a firm via a positive growth trajectory.

Working capital management (WCM) activity within the small business sector achieves a great degree of relevance in establishing healthy and vibrant economies. According to the Bolton Report (1971), they are seen as vital to the promotion of an enterprise culture and to the creation of jobs within the economy. In a Sri Lankan context SMEs are believed to provide the greatest impetus in relation to its economic progress as a developing country. Regardless of how they are defined, SMEs constitute the bulk of enterprises in all economies in the world and consequently according to Wignaraja and O'Neil (1999), claims ownership to the majority of the 'business stock' within economies. However, according to Pike and Pass (1987) given their reliance on short term funds efficient management of working capital is crucial for the survival and growth of small firms. Inability of financial managers of SMEs to plan and control properly the current assets and current liabilities, hence the net working capital of their respective firms have led to a large number of business failures.

The management of working capital is of particular importance to 'small business' which is devoid of access to the long term

capital market. Chittenden *et.al* (1998) opines that these firms tend to rely more on owner finance, trade credit and short term bank loans to 'leverage' their needed investments in the 'gross working capital' components of cash, accounts receivable and inventory. However, the failure rate among small business is very high compared to that of large business. Dunn and Cheatham (1993) conducting studies in the UK have shown that weak financial management, particularly poor strategies of working capital management and inadequate financing policies associated with minimum usage of long term financing – is a primary cause of failure among small business. The success factors and impediments that contribute to the ultimate business outcomes are categorized as internal and external factors. The 'Externalities' include 'financial policies', economic conditions, competition, government regulations, technology and environmental factors. Managerial skills, accounting systems, workforce and financial management 'strategies' are mostly designated internal factors that significantly impact financial performance of SMEs.

Though specific research studies of SMEs exclusively on the basis of impact in regard to appropriate working capital financial policy, WCM strategies and methods are scanty, Burns and Walker (1991) contend that the push factors for firms to adopt good working capital practices or econometric analysis to investigate the association between WCM and profitability 'standalone' have been undertaken in regard to both large and small firms in India, UK, US and Belgium.

Financial management of SMEs in developing countries like Sri Lanka is altogether a low priority area for research. In view of the foregoing and in recognition of the significance of the contributory role played by SMEs within the Sri Lankan economy – a developing nation, our study is a modest attempt to measure and analyze institutional mechanisms, interrelationships, policy and strategy impact and trend in regard to working capital management in relation to SMEs. This study therefore attempts to assess these 'dynamics' in relation to a sample of SMEs and its results are expected to contribute to the existing literature on working capital and SMEs.

The study objectives are to examine the working capital management of the sample firms, and in particular to

- Investigate relationships, feature and impacts of financial policy adopted on working capital management outcomes.
- Conceptually identify, assess and measure relationships amongst working capital management policies, methods and strategy.
- Determine and assess interconnection between the key outcomes of working capital management identified as: profitability, liquidity, solvency and value added.

The rest of the paper is organized as follows: Section 2 looks briefly at the theoretical underpinnings and the relevant literature which attempts to explain links between working capital financing policy,

management methods and related strategies whilst taking account of the required institutional characteristics to generate the interconnected features of the WCM outcomes of profitability, liquidity, solvency and value addition. The methodological part and the explanatory variables used for the analysis are dealt at Section 3. The data analysis and the empirical findings are discussed in Section 4 and Section 5 concludes on the results.

2. Literature review

2.1 Theoretical underpinnings

2.1.1 Nature and importance of working capital

The working capital meets the short term financial requirements of all entrepreneurial activity across designated sectors in business. It is a trading capital which changes form and is hardly retained in business for more than one year. The financial investment in it changes form and substance during the regular course of business dealings. Hence the need to keep an adequate quantum of working capital can hardly be questioned. Just as circulation of blood is necessary in the human body for its maintenance, the flow of funds is an essential feature associated to the continuance of business enterprise regardless of scale or sector. If it becomes weak, the businesses hardly prosper and survive. According to Rafuse (1996) working capital starvation is the most attributable factor associated with SME failures in many developed and developing countries. The ability of SMEs to generate net excess cash flows often determines their

success rates. Jarvis *et.al* (1996) contends that cash flow problems of many small businesses are exacerbated by poor financial management and in particular the lack of planning cash requirements.

2.1.2 The management of working capital

According to Kargar and Blumenthal (1994) performance levels of SMEs have been traditionally attributed to general managerial factors such as manufacturing, marketing and operations, working capital management may have a consequent impact on small business survival and growth. The financial health of businesses of differing scale are mostly related to the extent of efficient working capital management. The amounts of investment in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used in an efficient and effective way. However, evidence suggests that SMEs are not very good at managing working capital. Given that many small businesses suffer from under capitalization, the importance of exerting tight control over working capital investments is difficult to overstate.

A firm needs to be profitable and also be simultaneously able to translate such profits to cash within the same operating cycle to minimize its borrowings associated with its continued working capital needs. Thus the twin objectives of profitability and liquidity must be synchronized and one should not impinge on the other for long. Financial commitment towards current assets are inevitable to ensure delivery of goods or services to the ultimate customers and a

proper management of same should ensure positive impact on either profitability or liquidity. Blockage of resources at different stages of the supply chain will naturally prolong the cash operating cycle. This syndrome may increase profitability mainly due to increased sales, it may also adversely affect the profitability if costs related to working capital exceed the benefits of stock holding and or granting more trade credit to customers.

Another element of the working capital syndrome is accounts payable which does not consume resources; instead it provides short term finance. Thus it helps to reduce the cash operating cycle, but at times incurring an implicit cost where early settlement discounts are offered in relation to purchase invoices.

2.2 Review of previous studies

Working capital is the lifeblood of all firms. The SMEs are more vulnerable to fluctuations in working capital, hence they are unable to starve of cash. According to Peel *et.al.* (2000) small firms tend to have relatively high proportion of current assets, lesser liquidity, exhibit volatile cash flows and a high dependence on short term debt. The work of Howorth and Westhead (2003) suggest that small companies tend to focus on some areas of working capital management where they can expect to improve marginal returns. For SMEs that are in the growth phase, Peel and Wilson (1996) articulate that an efficient working capital management is a vital element for success and survival i.e. in regard to the twin aspects of profitability and liquidity. They further

contend that smaller firms should adopt formal working capital management policies and strategies in order to reduce the probability of business closure, as well as to enhance business performance. A study conducted by Grablowsky (1976) have indicated clear and distinct measures and the adoption of formal working capital policies, procedures and institutional mechanisms. According to Walker and Petty (1978) and Deakin *et.al.* (2001) managing the cash flow and the cash operating cycle is a critical component of the overall financial management for SMEs in particular due to their capital constrained nature and dependence on short term finance.

Given the above, efficient management of working capital and good credit management are contended to be pivotal issues related to the health and performance of the small firm contingent by Peel and Wilson (1996) accordingly. Berry *et.al.* (2002) opines that SMEs are deficient in the development of financial management practice and awareness of their positive fallouts in relation to financial outcomes. A Study conducted by Dechazal Du Mee (1998) revealed 60% of enterprises (SMEs) suffer cash flow problems. According to Narasimhan and Murty (2001) SMEs need to focus on cost containment, minimize investment in working capital and improve its efficiency to enable to enhancement of the return on capital (ROCE) the undisputed primary measure of performance. Both Shin and Soenen (1998) and Deloof (2003) in his recent study has revealed strong and significant relationships between the

measures of WCM and corporate profitability. These findings are particularly relevant to the SME scenario as they prompt the potential to increase profitability by reducing debtor and inventory turnover days. This is particularly of relevance for small growing firms who need to finance ever increasing amount of debtors within significantly credit driven markets.

Sri Lanka provides a good case study for this paper as it looks at the small and medium sized enterprises operating within the agriculture, manufacture, services and trading sectors of a small developing state. A sizeable portion of the previous studies on working capital management of overall financial management of small firms have focused on advanced nations such as US, UK and some other developed countries like Belgium and Australia. However, there is a lack of research on the working capital management of small and medium firms in the context of Sri Lanka. Therefore, this study attempts to fill this gap in the literature.

3. Methodology

The primary aim of this paper is to investigate the financial and management policies, WCM strategies and their interconnections within Sri Lankan SME adopted institutional mechanisms leading to the related outcomes of profitability, liquidity, solvency and value added. This is achieved by developing similar empirical frameworks first used by Asch and Kaye (1996); Gentry, Vaidyanathan and Lee (1990); Shin and Soenen (1998) and the subsequent work of Deloof (2003). We extended our study also by analyzing the

trends in working capital needs of firms and to examine the possible causes for any significant differences between the industries also by developing models and frameworks more suitable and hence displaying management practices more akin to Sri Lanka organizational management.

Our study focuses exclusively on SMEs operating in four major industry groups which are registered and organized as public companies and their combined all sector outcomes mainly. This restriction together with the requirement to be continuously quoted on the second tier Dirisavi Board of the Colombo Stock Exchange (CSE) over a consecutive period of four years places a limit on the number of firms qualifying for the study.

Thus the empirical study is based on a sample of 25 small and medium enterprises. The data has been collected from the financial statements of the sample firms having a legal entity and have been duly recognized by the second tier Board of the CSE as monitored by the Securities Exchange Commission (SEC). The sample was drawn from the certified list of companies trading on the Dirisavi Board of the CSE as at 31/12/2012, a data base for registered firms operating in diverse activities and for which data was available for a 4 year period, covering the accounting periods 2009, 2010, 2011, 2012 in full. The companies qualified for the above two conditions are further grouped into sectors based on the classification as officially listed by the CSE. The data set covers 25 firms from four industry sub-sectors : Agriculture (4), Trading(3), Service (15) and

Manufacture (3). This has given a balanced panel data set of 100 firm year observations and a combined 'all sector' observation for a sample of 25 firms.

For the purpose of this study, efficiency level which has a bearing on the 'overall working capital outcome' is measured by a suitably modified average efficiency index (AEI) as conceptualized by Ramachandran and Janakiraman (2009) for the purpose of distinguishing companies within the sample. The original model did not accommodate further classification as needed for this study. Hence a comprehensive measure of WCM efficiency is best captured by the modified benchmarks and the standard components of the formulator as listed in Appendix 1.

The methodology adopted for working capital financing policy determination is also specified in the said Appendix 1.

3.1 The considered variables

The working capital policy, strategy and efficiency measures together with the WCM outcome measures relative to profit, liquidity, solvency and value added have been computed using the formulas also depicted in Appendix 1. The cash conversion cycle (CCC) is used as a comprehensive measure of working capital as it shows the time lag between expenditure for the purchase of raw materials and the collection of sales of finished goods. The longer the cycle the larger the funds blocked in working capital. The determination of a composite average efficiency index (AEI) is a better measure since it relates the efficiency of a

business to both the performance and utilization aspects of the working capital current assets. There are many ways of managing the efficiency of working capital but in principle, key levers are of course, performance and utilization increases. The latter has become more important to many businesses as the former increasingly becomes more elusive.

3.1.1 Control variables

In order to account for firm's size and the other variables that may influence the SMEs overall performance, sales, a proxy for size (the natural logarithm of sales), the current assets to sales (CA/Sales) and the ratios of current assets to total assets (CA/TA), current liability to total assets (CL/TA) ratios are included as control variables in the regressions.

Objective findings were supplemented by perspectives drawn from the target audience within the framework to better enable the achievement of research objectives. Perspectives were recorded under the captions: general, working capital financing, management policy and working capital management impact.

3.1.2 Working capital analysis

The major components of gross working capital include stocks (raw material, work in progress and finished goods), debtors, cash and bank balances. The composition of working capital depends on a multiple of factors such as financing policies and WCM strategies, operating level, level of operational efficiency, inventory and book debt policies, technology utilized and the nature of industry. The degree of variation

inter-industry is expected to be high whilst the degree of variation is expected to be low for firms within the industry. Certain industries may display greater reliance on short term funds in regard to their current assets and hence create a threat to the industry's survival due to minimized liquidity cover to meet current obligations associated with the supply chain, particularly if this syndrome is recorded to be permanent. However, certain sectors which are less heavily mechanized may be seen to operate with a high proportion of liquid assets indicating a low fixed asset base. Another plausible occurrence within Sri Lankan SME sector is the high concern about current operations than about longer term issues like capacity and technology. In this given context distinct relationships and impacts may be seen to prevail within institutional mechanisms amongst financial and WCM policies, strategies together with efficient working capital outcomes of profitability, liquidity, solvency and value added. In confirmation of the empirical status quo in this regard, Weinraub and Visscher (1998) also report industry wise differences in the level of aggressiveness with respect to working capital investment over time.

4. Empirical analysis

Impact of financial policy on working capital management

Correlation Analysis :

Table 1 presents Pearson correlation coefficients for the variables used to assess the 'relationship' of working capital financial policy on working capital management outcomes measured by the overdraft movement proportion and the extent of

interest cover provided by profits before taxation. Short term financial policy as measured by short term finance to current assets (STF/CA) reports a significantly negative all sector co-relationship with profit before taxation relative to interest payable (PBIT/IP). This is consistent with the widely accepted view that excessive use of short term funding often at higher rates of lending erodes the profitability state, increases the enterprise specific financial risk level which on a cumulative basis reduces the interest cover proportion as measured by PBIT/IP. On a sectorial basis manufacture also reports a STF/CA and PBIT/IP relationship in 'regress' recording a negative coefficient of correlation.

Further analysis reveals a positive 'all sector' relationship between the overall short term financing policy measure STF/CA and the current year's overdraft (CYOD/PYOD) indicating the rate of expansion in confirmation of the theoretically accepted view point with regard to short term funding enhancements bringing increases of overdraft level and resultant financial risk levels. Sector wise 'Agriculture' further confirms this positive relationship.

A positive relationship is evident between the overall 'all sector' long term

financial policy measure long term finance to current assets (LTF/CA) and the interest cover ratio of PBIT/IP. These recordings are consistent with accepted views of permanent funding being available at lower rates of interest cost thus yielding relatively more surpluses to minimize financial risk due to the absence of exorbitant short term finance costs. From a profitability perspective manufacturing sector outcomes confirm the positive relationship in accordance with generally accepted views in finance literature.

A negative relationship is reported 'all sector' between LTF/CA and CYOD/PYOD measure which indicates relative expansion and contraction rates of this funding facility. The agriculture sector also confirms the negative direction of the all sector outcome.

The all sector outcomes within the context of both short term and long term finance and the similar recordings within agriculture and manufacture is seen to correspond. A distinct relationship between financial policy and working capital management outcomes of profitability and the financial risk profile of small and medium enterprises is suggested on a composite all sector basis.

Table 1. Pearson Correlation Coefficients.
 25 Small and Medium Enterprises – 2009-2012

| Ind. Ratio | Dep. Ratio | All sectors | Agriculture | Manufacture | Service | Trading |
|------------|------------|-------------|-------------|-------------|---------|---------|
| STF/CA | CYOD/PYOD | 0.18365* | 0.45123* | | | |
| | | 0.0703 | 0.0794 | | | |
| | PBIT/IP | -0.20181** | | -0.8241** | | |
| PF/CA | CYOD/PYOD | 0.0463 | | 0.001 | | |
| | | -0.18365* | -0.45123* | | | |
| | PBIT/IP | 0.20181** | | 0.8241** | | |
| | | 0.0463 | | 0.001 | | |

Note: ** Correlation is significant at the $\alpha=0.05$; * Correlation is significant at the $\alpha=0.1$. Control variables include: Sales (log), CL/TA, CA/TA, CA/Sales. N =88 (Number of observations dropped to 88 due to non-availability of data relating to selected accounting measures during certain years of the test period of 4years). The variables are defined as in Appendix 1.4years). The variables are defined as in Appendix 1.

Relationships between Working Capital Strategy and Policy

Correlation Analysis :

Table 2 also attempts to present the appropriate coefficients of correlations that assess the degree of 'relationships' between working capital management strategy and policy (methods) as measured by the Hardcore Net Working Capital (HCNWC), Gross Working Capital Strategy (GWC/SV) and financial health (WC/TA) on account of strategic dimensions and in regard to policy the cash conversion cycle (CCC) a consolidated proxy measure, inventory turnover (I/TO), debtors turnover (C/TO) and creditors payment period (CPP) accordingly. Theoretical relevance has guided the choice of variables under study.

A significant positive relation is shown 'all sector' between elements of the CCC and HCNWC. This position is consistent with the view that extensions of

the composite measure of CCC leads to increased investment in working capital. A negative 'abnormal' coefficient is reported within the agriculture sector thus diluting the 'all sector' context. CCC also reports a significant positive relation with GWC/SV – a key strategy measure.

The constituent WCM policy measures (method) of I/TO and CPP relates positively to 'strategy' measures of WC/TA and GWC/SV. The relationships confirm the theoretically accepted view of working capital investments rising correspondingly with increases in inventory turnovers and creditor payment periods. The agricultural sector is seen to confirm this contention whilst the service sector records a negative relation possibly due to a working capital (WC) investment reduction arising from tighter credit control generating a reduced debtors level – the major component of working capital investment.

Table 2. Pearson Correlation Coefficients.
25 Small and Medium Enterprises – 2009-2012

| Ind. Ratio | Dep. Ratio | All sectors | Agriculture | Manufacture | Service | Trading |
|------------|------------|-------------|-------------|-------------|-----------|----------|
| CCC | HCNWC | 0.17291* | -0.44494* | 0.57236* | | 0.57236* |
| | | 0.092 | 0.0842 | 0.0518 | | 0.0518 |
| | GWC/SV | | -0.57038** | | | |
| | | | 0.021 | | | |
| I/TO | WC/TA | 0.36711* | 0.66276** | | | |
| | | 0.0546 | 0.0051 | | | |
| CPP | GWC/SV | 0.33027* | 0.54434** | | -0.22652* | |
| | | 0.0861 | 0.0293 | | 0.0818 | |

Note: ** Correlation is significant at the $\alpha=0.05$; * Correlation is significant at the $\alpha=0.1$. Control variables include: Sales (log), CL/TA, CA/TA, CA/Sales. N=96. The variables are defined as in Appendix 1.

Interconnection between working capital management outcomes of profitability, liquidity, solvency and value added

Correlation Analysis:

Table 3 presents Pearson correlation coefficients for the variables used to assess the 'interconnection' between the key outcomes of WCM of : profitability as measured by the ratio of dividend on earnings per share (DPS/EPS), value added assessed by turnover and other income devoid of externally generated goods and services (TOI-PGSE), solvency and value added as evaluated by the earnings relationship to revenue reserves (RE/EPS).

Significant positive relationships are recorded 'all sector' between profits as measured by the ratio profits before interest and taxation on total assets (PBIT/TA) and value added (VA) as reported through TOI-PGSE, net profit proportion to sales (NP/S) and the solvency measure of RE/EPS. On a similar footing a positive correlation is reflected between PBIT/TA and DPS/EPS signifying the distinct association of profit and dividends, hence the long term solvency state of the enterprise. Sector wise agriculture, trading and service sectors confirm positive associations of profit measures (PBIT/TA), NP/S) to value added (TOI-PGSE).

Table 3. Pearson Correlation Coefficients
25 Small and Medium Enterprises – 2009-2012

| Ind. Ratio | Dep. Ratio | All sectors | Agriculture | Manufacture | Service | Trading |
|------------|------------|-------------|-------------|-------------|----------|------------|
| PBIT/TA | DPS/EPS | 0.23444** | | | | |
| | | 0.0195 | | | | |
| | TOI-PGSE | 0.16319 | | | 0.21807* | |
| | | 0.1067 | | | 0.0971 | |
| NP/S | RE/EPS | 0.34848** | | | | |
| | | 0.0004 | | | | |
| | TOI-PGSE | | 0.64354** | | | -0.64017** |
| | | | 0.0072 | | | 0.0249 |

Note: ** Correlation is significant at the $\alpha=0.05$; * Correlation is significant at the $\alpha=0.1$. Control variables include: Sales (log), CL/TA, CA/TA, CA/Sales. N =99. The variables are defined as in Appendix 1.

Table 4 further presents Pearson correlation coefficients for the variables adopted to evaluate the 'interrelationships' between solvency as measured by net total assets (TA-TL), the value added measure of TOI-PGSE and the solvency cum value added measure of RE/EPS. With regard to long term solvency, a very significant and

theoretically correct positive relationship is reported between the net worth measure of TA-TL and the value added measure of TOI-POGSE all sector. A positive relation is also recorded between TA-TL and RE-EPS – the alternate measure of 'value added' with 'agriculture' sector wise.

Table 4. Pearson Correlation Coefficients.
25 Small and Medium Enterprises – 2009-2012

| Ind. Ratio | Dep. Ratio | All sectors | Agriculture | Manufacture | Service | Trading |
|------------|------------|-------------|-------------|-------------|---------|---------|
| TA-TL | TOI-PGSE | 0.3056 | 0.80726 | | 0.28327 | 0.70165 |
| | | 0.0021 | 0.0002 | | 0.0297 | 0.011 |
| | RE/EPS | | 0.5351 | | | |
| | | | 0.0327 | | | |

Note: ** Correlation is significant at the $\alpha=0.05$; * Correlation is significant at the $\alpha=0.1$. Control variables include: Sales (log), CL/TA, CA/TA, CA/Sales. N =99. The variables are defined as in Appendix 1.

Regression analysis :

The outcomes of the initial 'all sector' multiple regression analysis performed to determine the 'strength' of the relationships considered for analysis of the effects of profit before interest and tax on the total asset base (PBIT/TA) and net assets (TA-TL) on the dependent value added measure (TOI-PGSE) is presented in Table 5. Further analysis of the 'effects' of PBIT/TA and the stipulated control variables of LN sales, CL/TA and CA/TA on 'dividends' (DPS) is also reflected in the said Table. Evidence arising from the 1st regression (all sector) records a positive high overall association with the independent parameters whilst reporting a correlation coefficient (R) of 0.3512 significantly. The adjusted R-squared explains 12% of the variation in 'value added' whilst recording a significance level of 0.0018.

The 2nd 'all sector' regression reports a R value of 0.4232 indicating a

positive high level of association. R-squared at 17% explains the extent of variation in 'dividends' at a significance level 0.0011. Further evidence of relationships and impacts of the control variables treated in this 'special instance' as independent suggest potential for 'contamination' of reported results. The DPS/EPS measure could be influenced by non quantifiables. β values indicates positive directions of parameter relationships whilst no multicollinearity is reported by the variance inflation factor (VIF).

The sentiments expressed above clearly indicate a back to back relationships between profitability and solvency in both the short and long term. These sentiments further imply profitability coupled with a conservative dividend policy will enable the payment of dividend to the key stakeholders and also the build-up of value added leading to reserves to enable the avoidance of insolvency.

Table 5. Regression of Value Added and Distributions on Profitability and Net Asset Variables. 25 Small and Medium Enterprises – 2009-2012

| Dep. Var. | Ind. Var. | Statistics | Adjusted Rsq | Sig F | Mlt R |
|-----------|------------|--------------------------|--------------|-------|--------|
| TOI-PGSE | PBIT/TA | R ² =0.1234** | 0.1051 | 6.75 | 0.3512 |
| | TA-TL | p=0.0018 | | | |
| DP/EPS | PBIT/TA | R ² =0.1791** | 0.1434 | 5.02 | 0.4232 |
| | SALES(log) | p=0.0011 | | | |
| | CL/TA | | | | |
| | CA/TA | | | | |

| Ind. Var. | β | T | P | Tolerance | VIF |
|--------------|----------|------|----------|-----------|---------|
| PBIT/TA | 12065533 | 1.66 | 0.0732* | 0.99896 | 1.00104 |
| TA-TL | 0.05385 | 1.81 | 0.0016** | 0.99896 | 1.00104 |
| Intercept | 1.91E+08 | 3.25 | 0.0995* | | |
| PBIT/TA | 0.00136 | 0.45 | 0.6535 | 0.94316 | 1.06027 |
| +SALES (log) | 4.37E-11 | 3.71 | 0.0004** | 0.95162 | 1.05084 |
| +CL/TA | 0.01332 | 0.08 | 0.9372 | 0.20325 | 4.92015 |
| +CA/TA | 0.12742 | 0.96 | 0.3406 | 0.20416 | 4.89807 |
| Intercept | 0.11836 | 2.25 | 0.0266** | | |

Note: ** Correlation is significant at the $\alpha=0.05$; * Correlation is significant at the $\alpha=0.1$. Control variables include: Sales (log), CL/TA, CA/TA, CA/Sales. N=99. The variables are defined as in Appendix 1.

5. Conclusion

The distinct analyses conducted have identified key management practices and hence may enable managers to identify areas which may call for improvement in regard to operational financial performance. The results have provided managers with information regarding the basic financial management practices used by their peers and their peers' attitudes towards these practices. The cash generation rate and working capital requirements of SMEs change over time frames, hence good synchronization of their assets and liabilities is a prerequisite for good corporate governance.

This study has shown that on a 'all sector' basis profitability and the net assets (solvency) states of SMEs record the most significant impact on the value added and dividend components accruing to the equity stakeholders of the enterprise. On this premise no 'hidden champions' were evident

within the different industries to be considered as best practice.

In conclusion, it could be said that further empirical studies on SME business financial management industry-wise to uncover specific factors and practices that better explain performance for some industries so as to extend them to other industries may be the current need. This would also assist policy makers and educators to identify the requirements and specific problems faced by SMEs in Sri Lanka especially as more emphasis is placed on the sector by the government. This study has come at an opportune time where the Sri Lankan government is deploying resources to help the SME sector so that the later can positively contribute to the Sri Lankan economy. The analysis has been constrained by the sample size and the nature of the data, which could have well affected the results. Further studies should aim at increasing the sample size for still better and consistent panel estimates.

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Appendix 1: Explanatory Variables – Financial Ratios

| <u>Variable Name</u> | <u>Definition</u> |
|----------------------|-------------------------------------|
| CA/Sales | Current assets to sales |
| CA/TA | Current assets to total assets |
| CCC | Cash conversion cycle |
| CL/TA | Current liabilities to total assets |

| | |
|-----------|--|
| CPP | Creditors payment period (days) |
| CYOD/PYOD | Current year overdraft to previous year overdraft |
| D/TO | Debtors turnover days |
| DPS/EPS | Dividend per share to earnings per share |
| GWC/SV | Gross working capital to sales value |
| HCNWC | Hardcore networking capital |
| I/TO | Inventory turnover days |
| LN-sales | Natural logarithm of sales |
| LTF/CA | Long term finance to current assets |
| NP/S | Net profit to sales |
| PBIT/IP | Profit before interest and tax to interest payable |
| PBIT/TA | Profit before interest and tax to total assets |
| RE/EPS | Revenue reserves to earnings per share. |
| STF/CA | Short term finance to current assets |
| TA-TL | Total assets minus total liabilities (net worth) |
| TOI-PGSE | Turnover and other income minus goods purchased externally (value added) |

WC/TA Working capital to total assets

EIWCM = PIWCM x UIWCM

•
$$PIWCM = \frac{I_s \sum_{i=1}^n \frac{W_i(t-1)}{W_{it}}}{N}$$

Where,

I_s = Sales index defined as $St/St-1$

W_i = Defined individual group of current asset component

N = Number of group of current asset component and

$t = 1,2,3,4, \dots N$

•
$$UIWCM = \frac{A_{t-1}}{A_t}$$

Where A = (Current assets)/Sales.