The effects of working capital management on profitability, liquidity, solvency and organic growth with special reference to SMEs: A review

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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 and ultimately to its organic growth extent. The purpose of this paper is to review the trends in working capital management and its impact on firms' performance and organic growth as experienced in previous studies. The theoretical underpinnings have also been evaluated and recorded as preliminary comments. The examination of literature has been categorized, so as to consider micro aspects of: definitions, nature, generics of working capital management and the key contributions of profitability, liquidity, solvency leading to organic growth. On a macro footing the impact of small and medium enterprise on national development in Sri Lanka and hence the need for a differentiated approach has been examined. A strong significant relationship between working capital management and profitability, liquidity, solvency and financial health has been found in previous empirical work. A case in point would be to determine by further research the extent of presence of these value drivers and determine the extent to which they champion, the cause of value enhancement amidst an increasing trend in the short-term component of working capital financing as reflected in their respective 'financial architectures'. Adoption of 'cutting edge' strategies and tactics in relation to working capital management practice seems to be a need for most SMEs in Sri Lanka.

Keywords: *Working Capital Management (WCM), Small and Medium Enterprise (SME), Profitability, Liquidity, Solvency, Working Capital Financing Policy (WFP), Working Capital Strategy (WCS), Cash Conversion Cycle (CCC), Working Capital Management Policy (WMP), , Organic Growth (OG)*

1. Introduction

As in most of Asia and the pacific, Sri Lanka too has a majority portion of its population living in rural areas which is estimated to be 78% of the country's total population. The small and medium enterprises (SMEs) in the rural areas are a major source of employment and production of food and therefore the Sri Lankan villagers' livelihood. So almost all governments that came to power since independence in 1948 seems to have understood the need to develop the small and medium enterprises considered a vital sector. According to the Central Bank of Sri Lanka (2014), the SME sector plays an important role in economic development through creation of employment opportunities, the mobilization of domestic savings, poverty alleviation, income distribution, regional development, training of workers and entrepreneurs, creating an economic environment in which large firms flourish and significantly contribute to the export cycle and related earnings.

Having understood the positive impact of SME, development and economic growth, successive governments in Sri Lanka have taken various steps in the form of fiscal and monetary stimulus to develop this vital SME sector (Gamage, 2003). But when analyzing the present contribution of this sector to the national income, it seems that it has not yet produced desired results when compared with the other developed and developing countries in the region. So it seems that there is a vast opportunity for Sri Lanka to develop this sector by adopting astute financial management practices in regard to its 'working capital approaches' thereby harnessing the proper benefits from the interrelated operationally correct financial fundamentals of profitability, liquidity and solvency to enable the correct platform for organic growth.

Business enterprises operating within a 'free trade' environment regardless of their scale is required by financial norm to maintain a balance between liquidity and profitability while conducting its day-to-day operations. Conceptually, liquidity is a precondition which ensures that firms are able to meet short term obligations and its continued flow can be guaranteed from a profit generating business entity. In view of the crucial role of cash within a business, it is often regarded as key indicator of continuing financial health.

Hence a business must be run both efficiently and profitably. In the process an asset-liability mismatches may occur which often results in increases in short term profitability at a risk of insolvency. On the other hand, too much focus on liquidity at the expense of profits may bring into focus the need to pursue working capital policies with appropriate risk return tradeoffs. Thus, the manager of a business entity is in a dilemma of achieving desired tradeoff between liquidity and profitability in order to maximize the value of a firm.

Small enterprises in particular are viewed as essential components of a healthy and vibrant economy. They are seen as vital to the promotion of an enterprise culture and to the creation of jobs within the economy (Bolton Report, 1971). Small and medium

enterprises are believed to provide a stimulus to the economic progress of developing countries and its importance is gaining widespread recognition whilst occupying a central place in the economy, accounting for a significant portion of 'business stock' and employing a substantial proportion of a private sector employees (Vignarajah and O'Neil, 2003). Storey (1994) notes that small firms, however, constitute the bulk of enterprises in all economies in the world. However, given their reliance on short term funds, it has long been recognized that the efficient management of working capital is crucial for the survival and growth of small firms (Grablowsky, 1976; Pike and Pass, 1987). A significant number of business failures have been attributed to inability of financial managers to plan and control appropriately the current assets and current liabilities of their respective firms (Smith, 1973).

Working capital management (WCM) is of great significance to the SMEs whose access to long term capital markets are constrained. These enterprises tend to rely more heavily on owner financing, trade credit and short term bank loans to finance in their needed investment in the distinct components of working capital being cash, accounts receivable and inventory (Chittenden *et.al*, 1998; Saccurato, 1994). Given these circumstances, the failure rate among the SMEs is relatively high in comparison to their larger counterparts. Studies undertaken in the western hemisphere with particular reference to the UK and US have shown that weak financial management particularly in regard to working capital management and insufficient long term financing is a primary cause of failure particularly attributable to SMEs (Berryman, 1983; Dunn and Cheatham, 1993). The contributory factors that propel success or failure are categorized as internal and external. The external factors include financing (such as the availability of attractive options), economic platforms, competitive dynamics, state intervention, technology and environmental factors. The internal factors are captioned as managerial skills, workforce, accounting systems and financial management practices.

Previous research studies have been undertaken on the working capital practices of both large and small firms in UK, US, India and Belgium adopting the survey based approach (Burns and Walker, 1991; Peel and Wilson, 1996) to determine the 'push' factors for firms to adopt good working capital practices or econometric analysis to investigate the 'association' between WCM and profitability stand alone (Shin and Soenen, 1998; Anand, 2001; Deloof, 2003).

Empirical research studies exclusively on the impact of working capital management on the combined 'status quo' on the conceptually recognized explanatory variables of profitability, liquidity, solvency and organic growth of the SMEs are scanty especially for the case of Sri Lanka. The significance of financial management of SMEs in developing countries and in particular, Sri Lanka, a small island developing state is altogether an ignored

area of research. In view of the foregoing and the wider recognition of the potential contribution of the SME sector to the economy of developing countries our study is a concerted attempt to assess and analyze the trend of WCM and the related needs of SMEs. This study, therefore, attempts to assess the impact of WCM on the identified conceptual variables of profitability, liquidity, solvency and organic growth on the basis of previous studies containing the perspectives of the related researchers and its results are expected to enable the formulation of a 'conceptual framework' to facilitate the determination 'if any' of relationships and impacts amongst WCM related variables that eventually lead to the SME objective of 'organic growth'. The paper is organized as follows;

Section 2 looks at the theoretical underpinnings and the relevant literature attempting to explain the 'links' between the fundamental concepts of profitability, liquidity and solvency which often leads to differing states of organic growth. The literature also delves into the relevance and importance of related supporting variables which 'galvanize' the identified fundamentals and the working capital management 'mechanism'. The researchers sectionally justified observations are also contained herein. The overall critique, conclusions and the identification of further research aspects are contained in Section 3.

2. Review of literature

2.1 The Management of working capital

The performances of SMEs have conventionally been attributed to the general management factors such as manufacture, marketing and operations. However, working capital management has been found to have consequential impact on SME survival and growth (Kargar and Blumenthal, 1994). The management of working capital has in all instances been important to the financial health of businesses of all dimensions. The quantum of investment in working capital are often high in proportion to the total assets employed thus requiring their efficient and effective use. However, recent evidences continue to reveal that SMEs are not very good at managing working capital. The importance of exerting tight control over working capital in the context of SMEs cannot be overstated, given the context of 'undercapitalization' within small business in Sri Lanka.

A profitable firm needs to essentially convert its surplus into cash from operations within the same operating cycle in order to avoid the need to borrow to support 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. Investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers and a proper management of the same should give the desired impact on either profitability or liquidity (Padachi, 2006). If operational resources are caught

up at the different stages of the 'supply chain', it will lengthen the operating cycle but reveal elevated levels of profitability (due to enhanced sales) which may also be offset if cost tied up in working capital exceed the benefits of holding more inventory and/ or granting more trade credit to customers.

2.2 Definition of classification and contribution of SMEs

SMEs are defined in a variety of ways by various countries using parameters such as number of persons employed, amount of capital invested, amount of turnover or nature of the business etc. Not only different countries apply different definitions on the concept of SMEs, even within countries, different regions and different institutions adopt various definitions in this regard.

Gamage (2003) argues that there is no clear definition for SMEs in Sri Lanka as different government agencies use different criteria such as employees, size of fixed investment, nature of the business and the sector in which the industry operates. Different terms used in different documents to identify this sector – small and medium industries or enterprises, micro enterprises, cottage and small scale industry brings in a flavor of diffusion. According to the Central Bank (1998) the Industrial Development Board (IDB) defines a small industry as an establishment whose capital investment in plant and machinery does not exceed Rs. 4 million (US$ 4200) and the total number of employees does not exceed 50 persons. A range of criteria are evident in the literature to define SMEs, but given that a study by Atkins and Lowe (1996) found that employee number were used as the criterion in 34 of 50 studies in the UK and Australia, number of employees was often the basis of classification.

For the purpose of a World Bank (WB) financed investment assistance scheme, financial institutions defines SMEs as those enterprises whose investment in fixed assets at original book value excluding land and building, do not exceed Rs 8 million (US$ 8400). Hewaliyanage (2001) contends that for the purpose of assistance programs implemented by the Sri Lanka Export Development Board (SLEDB) for export oriented enterprises, SMEs are defined as those enterprises with a capital investment excluding lands and buildings of less than 8 million (US$ 8400) or with annual export turnover of less than Rs. 50 million (US$ 525000).

Desai (2006) opined that the use of small and medium industry as a designation in the industry differentiates one set of industries from others. Comparatively, it is small or medium in operation, employment, products, capital, technology etc. Thus the SME sector share unique problems compared to others. In the case of manufacturing units, SME industries are to be expected to have a unique set of problems in relation to 'size' that differentiates them from large manufacturing units. At the same time, the SME sector has unique advantages and hence small is not only beautiful, but also beneficial, efficient and reliable.

According to Wijesinha (2011), a key issue that emerges – in fact a recurring

challenge – is that of the need for a common SME definition. Commercial banks, the Central Bank of Sri Lanka (CBSL), Export Development Board (EDB), Industrial Development Board (IDB), business licensing authorities of the government etc., all have slightly different definitions and this causes various problems for an SME in participating in the various schemes and services offered by each of them. Hence the government of Sri Lanka by its budget 2012 in the context of 'tax relief' categorizes, small scale enterprises to be those with a minimum investment of Rs. 25 million and a medium to be Rs. 50 million or more. From a turnover perspective SMEs are jointly categorized as those with a quarterly turnover of less than Rs. 500 million. This clarification by the 65th budget of the Sri Lankan government remains a significant milestone since SMEs consist of more than 75% of Sri Lankan industries and enterprises which are being steered towards private public partnerships. The Sri Lanka Auditing Practice Statement 1005 (2009) of the Institute of Chartered Accountants of Sri Lanka on the one hand states a small entity is any entity which has concentration of ownership and management whilst depicting few sources of income, unsophisticated record keeping with limited internal control and potential over ride of such controls. According to the European Union (EU) (2001), SMEs are defined as enterprises which have at most 250 employees and an annual turnover not exceeding 50 million Euros.

The Colombo Stock Exchange (CSE) (2011) as regulated by the Securities Exchange Commission (SEC) concludes for the purpose of the Dirisavi Board and default boards that any company with a published issued share capital with less than Rs. 100 million in the last three years is a small and medium enterprise by definition.

The Institute of Chartered Accountants of Sri Lanka initiated Government of Sri Lanka Accounting and Auditing Standards Act (1995), taking a wider holistic view of SMEs, contend that SMEs play a critical role in a country's economy be it job creation, entrepreneurship or income generation and would be defined as entities that do not have public accountability and publish general purpose financial statements for external users but specifically excluding those entities indulging in banking, insurance, leasing, factoring, finance, civil trust and fund management activities. The Government of Sri Lanka Securities and Exchange Commission Act No. 36 of 1987 categorized stock brokers, stock exchanges and companies were additionally excluded together with public corporations.

The researcher opines that it is possible to concur with the Institute of Chartered Accountants of Sri Lanka's Accounting Standards definition for small and medium sized institutes (2011) in regard to the precise conceptualization of SMEs within the current dichotomic context of small business in Sri Lanka.

2.2.1 Contribution of SMEs to national development in sri Lanka

SMEs have been identified to play a crucial role in the economic development process by developed as well as developing Nations. It is even more important to developing countries as poverty and unemployment are burning problems in those economies.

According to Hewaliyanage (2001) "SMEs perform a strategic role in Sri Lanka. It accounts for a very high percentage of the total number of industrial and business establishments as in other developing countries. SMEs promote economic growth by import substitution as well as through direct exports, and they mostly supply goods and services to large directly exporting ventures and thereby contribute towards alleviating balance of payments difficulties". The Central Bank of Sri Lanka (1998) reported that, "According to the industrial census conducted by the Department of Census & Statistics in 1983, their were a total of 102,721 registered and informal industrial units in the country producing various types of products and employing 639,256 persons. The survey findings also indicated that industrial establishments below 5 employees accounted for 84% of total establishments and 28% of total employment, but accounted for only 7.5% of the total output and 7.0% of the value added in the industrial sector. Enterprises having over five employees represented less than 15.7% of all establishments, but accounted for 92.5% of the output and 71.6% of total employment".

The significance of the SMEs within the Sri Lankan economy is indicated by Ponnamperuma (2000) where he contends that, "In 1977, a report was submitted to the Development and Review Committee on small and medium scale industries of the Industrialization Commission stating that there were 50,000 registered and 125,000 unregistered SMEs. Another survey conducted by the United Nations development program estimated that SMEs with fixed assets of Rs. 10 million or less account for 90% of all enterprises, 70% of total employment and 55% of gross value added in the private sector.

According to the Department of Census and Statistics Annual Survey of Industries (1998) data which provides a framework for analyzing the contribution of industrial enterprises to the national economy in Sri Lanka under the International Standard Industrial Classification (ISIC) of the United Nations, the majority of establishments in the manufacturing sector are coming under the category of small business (about 90%). But their contribution to the output is very low (about 6%). On the other hand, there are only 2% of large scale establishment in the category of manufacturing, but it accounts for more than 50%of output. When analyzing the category of mining and quarrying, almost similar conclusions can be drawn.

Luetkenhorst (2004) opines that it is of paramount importance to consider the linkages between large and small enterprises if foreign investment is to be firmly rooted in a country in order to generate broader economic spread effects to propagate

development. The integration of SME suppliers in global value chains is critically important whilst domestic industry continues to be the backbone of most developing economies with foreign investment assuming a secondary yet crucial role as provider of technologies and skills. According to Kazibayer (2004) considering the role SMEs can play in reducing poverty – economic growth and poverty reduction are two sides of the same coin as sustainable poverty reduction cannot be delinked from an economy's growth performance. While income distribution is an important variable to be considered, the key driver of poverty reduction is long term productivity enhancement which in turn generates economic growth and increases in standards of living. However, Uddin (2008) contends that economic efficiency and overall performance hence the ability of the SMEs to contribute to development especially as the developing countries are considerably dependent upon macroeconomic policy environment and specific promotion policies pursued for their benefit.

However, Beck et.al. (2003) opines that empirical analysis does not support a clear causal relationship between growth, equitable enterprise structures with a high SME share and poverty reduction. Although it is frequently claimed that SMEs make the most significant contribution to job creation and in times of crisis, informal micro enterprises make up a buffer to provide poor people with a basic income. Econometric cross-country studies show that there is neither clear evidence of a higher share of SMEs contributing to economic growth nor is there evidence that SMEs reduce poverty.

However, Perera and Wijesinha (2011) opined that there are major differences in the capabilities and competitiveness of SMEs within sectors and industries. SMEs that are more efficient, innovative, growth-oriented, outward looking and learning-capable, deserve closer attention and collaborative support due to several reasons, and these SMEs must be identified and assisted. First such firms have better prospects for success being more focused and manageable, administratively and financially. Second, they would be more receptive to policy support and facilitation, targeted with an efficiency-oriented and time bound approach. Third, having been provided initial assistance and facilitation, they would also have better success in self-diagnosis and self-improvement.

According to Poonamperuma (2000), it is clear that although there are significant numbers of SMEs in Sri Lanka, their contribution to the national economy in terms of output and share of employment has been very low. However, it can be observed in other developing and other developed countries in the region that the SME sector has contributed significantly to their economies in terms of both the employment share and share in GDP. Ponnamperuma (2000) further contends that when compared with other developing countries as well as developed countries in the region, it is clear that the SME sector in Sri Lanka has not yet achieved its anticipated results and hence there is a great need to further improve the

inherent capabilities of these industries and thereby harness the full potential of the sector.

The contributory roles played by SMEs in regard to national development amongst diverse economies are distinctly viewed by the researcher to be more influenced by macro policies pursued, cultures, productivity levels and other nationally categorized priorities over and above routine working capital management practices only.

2.3 Nature and importance of working capital

Working capital meets the short term financial requirements of a business enterprise. It is a trading capital, not retained in the business in a particular form for longer than a year. The money invested in it changes form and substance during the normal course of business operations. The need for maintaining an adequate working capital can hardly be questioned.

According to Rafuse (1996) just as circulation of blood is very necessary in the human body to maintain life, the flow of funds is very necessary to maintain business as if it becomes weak, the business can hardly prospect and survive. Working capital starvation is generally credited as a cause if not the major cause of small business failure in many developed and developing countries. Javis *et.al* (1996) contend that success of a firm depends ultimately on its ability to generate cash receipts in excess of disbursements, The cash flow problems of many small businesses are exacerbated by poor financial management and in particular the lack of planning cash requirements.

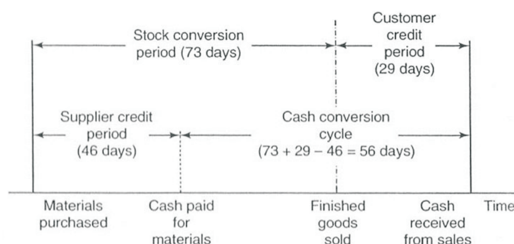
Bhattacharya (2002) argues that working capital investment is mostly a result of purchase and sales operations. They contend that a firms operating cycle consisting of the three primary activities – purchasing resources from suppliers, producing the product internally, and selling the product to customers will determine a firm's working capital investment and its financing needs. According to Burns and Walker (1991), the ultimate objective of a firm is the creation of cash value to the owners, all or part of this cash is paid to the suppliers of both short term and long term capital in the form of interest, dividend or retained in the firm. This marks the end of the operating (working capital) cycle but the start of another and the management of this cycle is significant and important for SMEs. However, the dynamics of entrepreneurial activity may require the investment in working capital to differ.

Bennett (1987) argues that working capital levels fluctuate due to production/ sales rate changes; production/ sales cycle differences; collection or payment period improvements leading to variable costs, fixed costs and selling price differences.

Working capital investment is of equal importance in both manufacturing and service based enterprises. The main differences according, to Asch and Kaye (1996), is whether funds are tied up in stocks or work in progress and their sources of funding – permanent funds may be used for the provision of adequate fixed assets, however over-investment in fixed assets

must mean that the working capital which generates the profits may be under funded. Richards and Laughlin (1980) contend working capital is the fund required to support the expenses of production, sales, distribution and administration required prior to the receipt of the cash from the sale of finished goods.

Deloof (1996) contends that the 'Cash Conversion Cycle' (CCC) as depicted in Fig. 1.1 could be used as a comprehensive measure of Working Capital Management (WCM), so as to ensure the correct level of working capital due to its importance in business operation. The cash conversion cycle is simply (number of days accounts receivable + number of days inventory – number of days accounts payable).



Cash operating cycle = 56 days

Cash operating cycle = 56 days

Source : Pike and Neale, 2006

Fig. 1.1 Cash conversion cycle

Amplifying the importance of working capital, Schilling (1996) mentions an optimum liquidity necessary to support a given level of business activity, in his writing. He further contends it is critical to deploy resources between working capital and capital investment, because the return on investment is usually less than the return on capital investment, hence deploying resources on working capital as much as to maintain optimum liquidity position is necessary – a state clarified by the relationship between cash conversion cycle and minimum liquidity.

Farragher, Kleiman and Sahu (1999) found that 55% of firms in the Standard and Poor (S & P) Industrial Index complete some form of a cash flow assessment, but did not present insights regarding account receivable and inventory management or the variations of any current assets, accounts or liability accounts across industries. Thus mixed evidence exists concerning the use of working capital management techniques and their usage, though working capital management and its methodologies are distinct in their importance.

For many firms, WCM is a very important component of their financial management strategy. More recently, Afza, Sajid and Nazir (2009) argue that efficient management of WC is an essential pre-requisite for the successful operation of a business enterprise and improving its rate of return on the capital invested in short term assets.

Amplifying the importance of WC, Smith (1980) contends that the main objective of a firm is to increase the market value, hence efficient WCM is an important component of the general strategy, aiming at increasing the market value. Since the flexibility of this group of assets is very high in terms of adapting to changing conditions and due to these characteristics they can often be applied to realize the main objective of financial management through policy changes.

According to Moyer *et.al* (2009), working capital is also a major external source of capital for especially small and medium sized and high growth firms. These firms have relatively limited access to capital markets and tend to overcome this complication by short term borrowing. Working capital position of such firms is not only an internal firm-specific matter, but also an important indicator of risk for creditors. Higher amount of working capital enables a firm to meet its short-term obligations easier. This results in increased borrowing capability and decrease in default risk.

Highlighting the importance of working capital management, over twenty years ago, Largay and Stickney (1980) reported that the bankruptcy of W.T. Grant, a nationwide chain of department stores should have been anticipated because the corporation had been running a deficit cash flow from its operation for eight of the last ten years of its corporate life.

Sen and Oruc (2008) contend that the main objective of a firm is to increase the market value. Working capital management affects profitability of the firm, its risks, thus its value. In other words, efficient management of working capital is an important component of the general strategy aiming at increasing the market value. Since the flexibility of this group of assets is very high in terms of adapting to changing conditions, and due to these characteristics they can often be applied to realize the main objective of financial management through policy changes.

Osisioma (1997) contends that it is a proven fact over and throughout the entire history of business entrepreneurship that the overall success and continued sustenance of a business enterprise depends largely on the solvency status of the business.

However, Deloof (1996) contends that SMEs have not developed their financial management practices to any great extent and they conclude that owner managers should be made aware of the importance and benefits that can accrue from improved financial management practices. Filbeck and Krueger (2005) opines that working capital management is important because of its effects on the firms profitability, risk and consequently its value.

Within the context of small and medium enterprises (SME), Ramachandran and Janakiraman (2009) opine that working capital (WC) is the flow of ready funds necessary for the working of a concern. It comprises funds invested in current assets (CAS) which in the ordinary course of business can be turned into cash within a short period without undergoing diminishment in value and without disruption of the organization. Current liabilities (CLS) are those which are intended to be paid in the ordinary course of business within a short time. Every company has to make arrangements for adequate funds to meet the day-to-day expenditure apart from investment in fixed assets (FAS). The internal resources of a business organization often are insufficient to meet all its needs. Also it is not always possible for the owners, promoters or

entrepreneurs to mobilize finance from personal resources. Resources thus financed via borrowing, keeping in view the short, medium and or long term requirement of trade or industry for funds have to be most efficiently managed and optimally used. The anticipated level of efficiency is dependent on the twin concepts of performance and utilization of current assets.

From a holistic point of view, the researcher wishes to agree with Rafuse (1996) as to the circulatory nature of working capital which enable the SME's short term operational ability. Disagreeing with Deloof's (1996) view that SMEs have not developed their financial management practices, the researcher places on record the presence of sector centric WCM practices, often observed within a business enterprises specific context in concurrence with Moyer et.al. (1992).

2.4 Generic management of working capital

General management in most enterprises involves the core activities of planning, direction, coordination and decision making. Asch and Kaye (1996) opines that working capital management in its generic form involves two dimensions of policy-working capital management policy (WMP) and working capital financing policy (WFP). WMP being denoted strategically as Relaxed and Aggressive in relation to the proportionate change of sales and current assets. WFP was taken to the three categories of conservative, moderate and aggressive in line with the use of the extent of debt capital to finance permanent and fluctuating current assets. Kargar and Blumenthal (1994) contend that 'while the performance levels of small businesses have traditionally been attributed to general managerial factors such as manufacturing, marketing and operations, appropriate working capital management may have a consequent impact on small business survival and growth. The management of working capital is important to the financial health of business of all sizes'.

A firm can be very profitable, but if this is not translated into cash from operations within the same operating cycle, the firms would need to borrow to support its continued working capital needs. According to Rafuse (1996), the twin objectives of profitability and liquidity must be synchronized and one should not impinge on the other for long. Whilst accepting that investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers, a proper management of same should give the desired impact on either profitability or liquidity in the context of the SME sector. Kesseven Padachi (2006) is of the view that if resources are blocked at the different stages of the supply chain, it will prolong the cash operating cycle and increase profitability due to increase in sales, it may also adversely affect the profitability if costs tied up in working capital exceed the benefits of holding more inventory and/ or granting more trade credit to customers. Peel *et.al.*'s (2000) study 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.

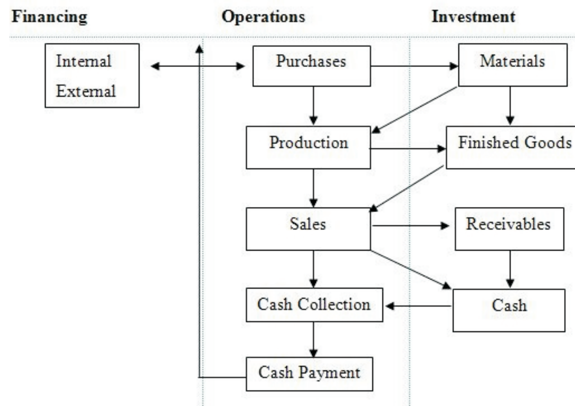
Shin and Soenen (1998) and Deloof (2003) both find a strong significant relationship between the measures of working capital management and corporate profitability. Their findings suggest that managers can increase profitability by reducing the number of day's accounts receivable and inventories. This is particularly important for small growing firms who need to finance increasing amounts of debtors. The need to customize generic working capital management methodology initially devised to suit large corporate entities is clearly amplified in the sentiments of Sajjad (2010), "Regulators need to think small first when developing business rules, rather than adopting rules intended originally to be used by multinationals operating in the world's capital markets."

Desai (2006) categorically argues that "an essential pre-condition for successful financial management is the establishment of sound and consistent asset management policies, covering fixed as well as current assets. An effective utilization of working capital results in the maximization of productivity and profits. Profitability and solvency are twin objectives of working capital management; these can be achieved by striving to maintain a correct ratio between working and fixed capital."

In a regional study, Pandey and Perera (1997) provid empirical evidence of working capital management policies and practices of the private sector manufacturing companies in Sri Lanka. They found that generally companies have 'informal working capital policy' and company size has an influence on the overall working capital policy (formal or informal) and approach (conservative, moderate or aggressive). Moreover, company profitability has an influence on the methods of working capital planning and control.

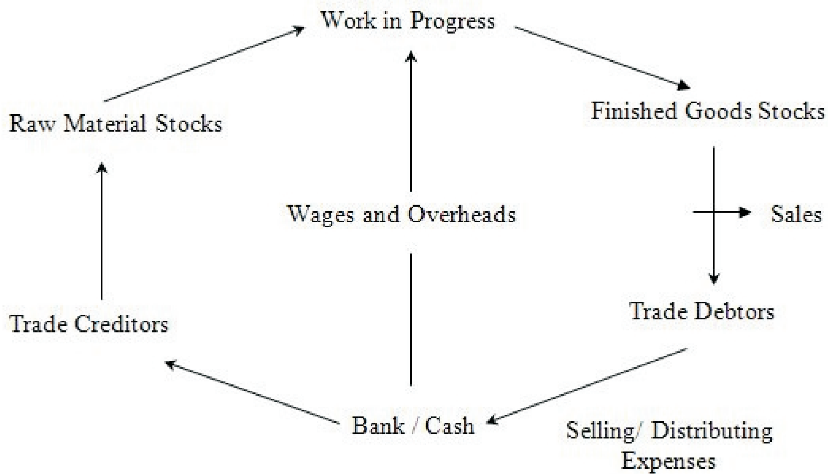
A study by Grablowsky (1976) and others show a significant relationship between various success measures and the employment of formal working capital policies and procedures. Walker and Petty (1978); Deakin and Logon (2001) argue that managing cash flow and the cash conversion cycle is a critical component of overall financial management for all firms, especially those who are capital constrained and hence, more reliant on short term sources of finance. SMEs lend themselves to this situation more readily.

Moyer, McGuigan and Kretlow (2009) contend that the working capital cycle (WCC) that starts with financing (for the purchase of materials) continues to operations (purchase, production and sales) and ends up as investment in cash, inventories and receivables as depicted in Fig. 1.2. Accordingly, Banergee (1997) opines that a firms operating cycle (OPC) as reflected in Fig. 1.3 is distinct from the working capital cycle and consists of three primary activities – purchasing resources from suppliers, producing the product internally and selling the product to customers. This operating cycle determines a firm's working capital investment and its financing needs.



Source: Moyer, McGuigan and Kretlow (2009)

Fig.1.2 Working capital cycle



Source: Banerjee (1997)

Fig.1.3 Operating cycle

According to Pike and Neale (2006), working capital management essentially involves a strategic choice between a more aggressive approach and a relaxed one both essentially contributing to the tradeoff between risk and profitability as seen in Fig. 1.4. They contend the curvilinearity of both schedules permit and suggest economies of scale which enables working capital expansion at slower rates in comparison to sales. Accordingly related cost behaviors in relation to respective working capital strategies adopted are depicted below in Fig. 1.5 and 1.6 while pegging optimal level of working capital.

Source : Pike and Neale (2006)

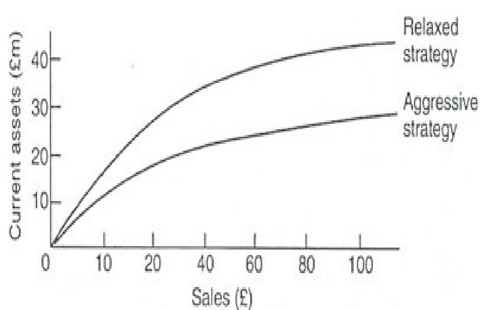


Fig. 1.4. Working capital strategies
Source : Pike and Neale (2006)

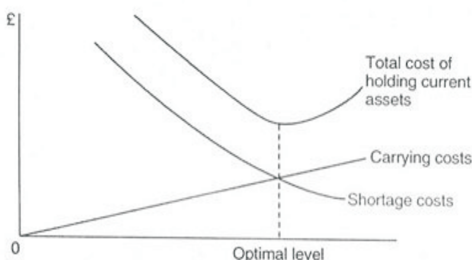


Fig. 1.5. Working capital strategies and optimal level of working capital - relaxed strategy
Source : Pike and Neale (2006)

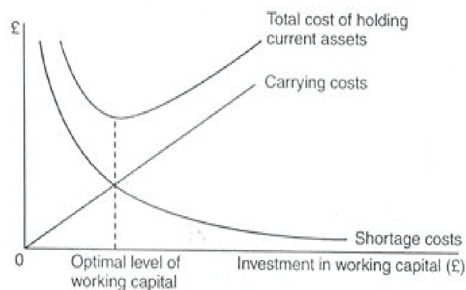


Fig. 1.6. Working capital strategies and optimal level of working capital aggressive strategy

According to Asch and Kaye (1996), the impact of long term debt hence financial gearing on the profitability and subsequent return on equity is a complementary feature of working capital financial policy. Adoption of aggressive and conservative financial policies enables more long term debt to be applied to the permanent current assets thus associating financial risk to a tradeoff between profit before interest and tax (PBIT), return on equity (ROE) and levels of gearing as indicated in Fig. 1.7.
Source : Asch and Kaye (1996)

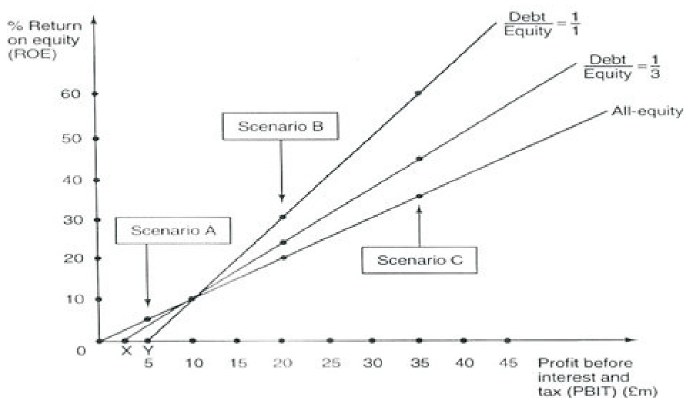


Fig. 1.7. Gearing impact on return on equity

Asch and Kaye (1996) contend that from a general

management perspective, application of core activities of planning, direction, coordination and decision making in relation to working capital management policy and working capital financial policy is in concurrence with the researchers view point. But the researcher supplementarily opines in line with Sajjad (2010) of the need to customize generic working capital methodology into enterprise specific micro competencies.

2.5 Profitability, Liquidity, Solvency and Financial Health

Profitability is the most significant and telling of financial outcomes of small business enterprises. Profit is an indication of how successful enterprise is in terms of generating returns on their investment in working capital and permanent infrastructure of the enterprise. Analysts contend that if an enterprise is liquid and efficient it should be profitable.

Deloof (2003) finds working capital management affect profitability of Belgian firms. The results suggested that managers can increase corporate profitability by reducing the number of day's accounts receivable and inventories. Less profitable firms were found to wait longer to pay their bills and he found a significant negative relationship between gross operating income and the number of days receivable, inventories and accounts payable of Belgian firms.

Samiloglu and Demirgunes (2008) argue that bankruptcy may also be likely for firms that put inaccurate working capital management procedures into practice, even though their profitability is constantly positive. Hence, it must be avoided to recede from optimal working capital level by bringing the aim of profit maximization in the foreground, or just in direct contradiction, to focus only on liquidity and consequently pass over profitability. While excessive levels of working capital can easily result in a substandard return on assets; inconsiderable amount of it may incur shortages and difficulties in maintaining day-to-day operations.

Amit, Debashish and Bebdas (2005) studied the relationship between working capital and profitability in the context of Indian Pharmaceutical Industry and concluded that no definite relationship can be established between liquidity and profitability, whilst Narware (2004) in his study of working capital management and profitability of NFL, a fertilizer company disclosed both negative and positive association.

Smith (1973) identifies eight major theoretical approaches taken towards the management of the working capital and stresses the need for the development of a viable model with the dual finance goals of profitability and liquidity. He argues that only such models will assist practicing financial managers in their day –to-day decision making.

Raheman and Nasr (2007) use a sample of 94 Pakistani firms listed on the Karachi Stock Exchange (KSE) for a period of 6 years from 1999 – 2004 to study the effect of different variables of working capital

management on net operating profitability. The results of the study showed a negative relationship between variables of working capital management including the average payment period, cash conversion cycle and profitability. The size of the firm measured by natural logarithm of sales and profitability was found to have a positive relationship.

However, Smith and Begemann (1997) emphasize that those who promoted working capital theory shared that profitability and liquidity comprised the salient goals of working capital management. The problem arose because the maximization of the firm's returns could seriously threaten its liquidity, and the pursuit of liquidity had a tendency to dilute returns. However, emphasizing the importance of liquidity, Jose *et.al.* (1996) articulate that firms with glowing long term prospects and healthy bottom lines do not remain solvent without good liquidity management with the aid of the dynamic measures of the cash conversion cycle which measure the time lag between cash payments for purchase of inventories and collection of receivables from customers.

The Finance Business Act No.42 (2011) articulates and provides the rationale for the mandatory monitoring and regulation of desired levels of capital, liquidity, earnings and solvency to ensure sustainability of non-banking financial institutions (NBFIs). The Act uses a benchmarked framework consisting of the variables: capital adequacy; liquidity; earnings; asset quality and management quality. Bank rating is made dependent on these credentials. According to the regulation of Insurance Industry Act No.43 (2000), a desired level of solvency must be maintained by all players within the insurance industry to enable uninterrupted coverage and service to the insured and other stakeholders. The Act proposes that the available level and the required level of solvency as a margin should as a base rate be not less than one (1).

Altman (1968) opines that the probability that a firm will go bankrupt within the next two years could be predicted with the aid of a Zeta score (Z) measure of financial distress. The score uses multiple corporate income and balance sheet values to measure the financial health of a company. The model was taken to be a linear combination of four or five common business ratios, weighted by coefficients estimated by identifying a set of firms which had declared bankruptcy being subsequently matched to a sample of firms which had survived, with matching by industry and approximate size (assets). The score was applicable to publicly held manufacturing companies and was given as: $Z = 1.2 (T_1) + 1.4 (T_2) + 3.3 (T_3) + 0.6 (T_4) + 0.999(T_5)$. T values being determined by business ratios is defined for discrimination.

However, Grice and Ingram (2001) contends that corporate failure cannot be conceptually defined whilst models in use are based only on the past where the macro economic landscape was distinctly different. The use of comparison methodologies is made difficult due to different accounting policies being adopted sometimes year on year.

The researcher agrees in line with Samiloglu and Demirgunes (2008) that bankruptcy is an eventuality even amidst profitable states where inappropriate working capital procedures are being adopted, whilst disagreeing with the contentions of Amit, Debashish and Behdas (2005) that no definite relationships can be established between liquidity and profitability.

2.6 Organic growth of SMEs via business efficiency

Growth of SMEs arises organically due to retention of internally generated profits arising from business efficiency. Use of appropriate working capital management strategy enables this type of organic growth. According to Hansson (2001), small enterprises have been encouraged to pursue growth because of their important contribution to the economy, particularly in terms of employment creation, innovation and long term development of economies. Storey (1994) is of the view that growth in small enterprises remains both infrequent and poorly understood. However, changes in organizational size may be accompanied by change in organizational culture which could have adverse consequences. From a different perspective, Pike and Pass (1987) argue that economic recessions have severely stretched the financial resources of many businesses. One result has been to focus attention on the management of working capital in SMEs that have often had to remain solvent by shrinking. According to Penrose (1959) "the term 'growth' is used in ordinary discourse with two different connotations. It sometimes denotes merely increases in amount; for example, when one speaks of 'growth' in output, export and sales. At other times, however it is used in its primary meaning implying an increase in size or improvement in quality as a result of a process of development akin to natural biological processes in which an interacting series of internal changes leads to increase in size accompanied by changes in the characteristics of the growing object".

Business efficiency and subsequent organic growth may accrue due to factors associated with the 'value chain' which needs to be financed via adequate capital – both working and permanent capital. According to Siriwardana (2010) 'value chain' is a series of activities that add value to a final product from primary production to processing, packing and ending with the marketing and sale to the consumer or end-user. Each step or activity in the chain is composed of processes undertaken by consecutive enterprises, adding value to the product. Entrepreneurs who are actively involved in a series of activities needed from production level to the end user can be defined as actors of a value chain. Conventional approach of SME financing has not taken this value chain aspect seriously into account and focus has been placed more on collaterals, financial capabilities and project feasibility on individual basis assuming that market and processing linkages will continue. Due to isolated nature, many SMEs mostly agricultural producers have encountered many difficulties at the level of marketing

and they were often exploited by various opportunistic intermediaries.

Collaborative studies provide a valuable snapshot of what is happening across several jurisdictions. A study by the Chartered Institute of Management Accountants (CIMA), the American Institute of Certified Public Accountants (AICPA) and the Canadian Institute of Chartered Accountants (CICA) (2011) opines that there is a growing emphasis small and medium sized enterprises (SMEs) are placing on 'sustainability' as it becomes increasingly crucial to business efficiency, organic growth and overall performance in terms of profitability. It is also contended that while compliance with regulatory requirements remain the most common driver of business sustainability, profitability and other strategic factors are increasingly significant. A sustainable business is more robust and more efficient; it appeals to customers changing values, strengthens relationships with suppliers and positions the brand as a good corporate citizen. It can reduce the variable costs of running a business while driving profitability and growth.

The Sri Lankan National Budget (2012) contends that the SMEs are the backbone of our economy thus any budgetary stimulus should relate to the SMEs that have a quarterly turnover of Rs. 500 million or less. Hence fiscal incentives such as exemption from economic service charge, allocation of an earmarked 10% of funds in investment fund accounts in banking and financial institutions for fund requirements of SMEs are expected to propel business efficiency and organic growth.

Alarape (2007) opines that "with debt financing likely to be scarce in the forcible future, the only way forward for most growth-minded organizations is via internally generated profitable revenue expansion – the organic route". He further argues that it may not be as glamorous as mergers and acquisitions, and stakeholders may not perceive it as transformative in the way that they might perceive an acquisition as 'organic growth' has the rather daunting reputation of being dependent on charismatic leadership and the ability to create a "culture of innovation".

Lafley and Charan (2008) argue that an organic growth strategy is achievable even in "mature" markets. Many observers attribute the long rise in Proctor and Gamble's Stock Price since 2001 largely to the company's relentless focus on sustainable organic growth which is considered as "less risky than acquired growth, and more highly valued by investors.

Growth is an important precondition for a firm's longevity. Negative growth of an SME is often a sign of problems, while stagnation, i.e. a situation where growth has stopped is usually indicative of problems that a firm will face in the future. According to Timmons (1999) growth often has instrumental value. For new ventures, firm growth is needed to ensure an adequate production volume for profitable business. Growth can serve as an instrument for increasing profitability by enlarging the firm's market share. Other similar goals

include securing the continuity of business in the conditions of growing demand or achieving economies of scale. Moreover, growth may bring the firm new business opportunities and a larger size enhances its credibility in the market. Also achieving a higher net value of the firm can be regarded as a motive for organic growth.

Akinwande (2010) avers that the management of working capital impacts on liquidity, investment portfolio and profitability. All these three factors are decisive in the growth or failure of a business. Hence good performance in working capital management affects these decisive factors favorably and thus contribute to organic growth and success of the business.

According to MacDonald *et.al* (2005), investigating the current and potential role of intellectual property rights (IPR)(a non financial input to support the growth and competitiveness of small and medium size enterprises in ASEAN) show the process through which IPR contributes to SMEs is complex and needs to be understood in the context of business strategy and technology transfer and use by SMEs. Hence, maximizing IPR contribution to the growth and development of SMEs in ASEAN requires the matching of various components of IPR regimes to different levels and stages of firm development in different national economic contexts. More recently, Ting (2004) highlighted many challenges that are still facing Malaysian SMEs. He identified five key challenges: lack of access to finance, human resources constraints, limited or inability to adopt technology, lack of information on potential markets and customers and global competition. He also argues that there is a high risk that SMEs will be wiped out if they do not increase their competitiveness in the new, rapidly changing world of globalization.

According to Miles and Snow (1978), the success of SMEs under globalization depends in large part on the formulation and implementation of strategy which reflects the firm's short and long term responses to the challenges and opportunities posed by the business environment. SMEs execute strategies to attract customers and deal effectively with a myriad of environmental concerns, such as competitors, suppliers and scare resources.

Mansfied (1962) articulates organic growth to be, "it is the probability of a given proportionate change in size during a specified period being the same for all firms regardless of their size at the beginning of the period." Conversely Sutton (1997) further opines the Gibrat's law on growth as "expected value of the increment firm's size in each period is proportional to the current size of the firm".

Kazanjian, Hess and Drazin (2006) contend that through much of the 1990s corporations realized extraordinary growth in revenue and earnings which unfolded a trend that brought significant pressure for continued growth as measured by quarterly reports of performance against forecasts.

Baumol (1962) argues that growth remains one of the most intriguing

organizational objectives. Organizational science has examined growth both as a means to profitability and as an alternative to profitability. Growth is a central concept which is either a means to an end or an end itself which may require specific structures and strategies according to the specific variety – organic or inorganic. Organic growth is said to be qualitatively different in the substance and character of the key tasks central to success, from inorganic growth via acquisition.

Hess (2007) opines that high economic value creating companies who consistently out perform their industry competition primarily through organic growth can be determined through the organic growth index (OGI) which identifies with the 6 denominator keys to high organic growth, namely;

1. A simple focused "elevator pitch" business model which can be easily understood by the average employee;
2. A "small company soul" in a big company body – companies entrepreneurially structured with "ownership" cultures but with strong central "back office" controls over quality, risk and capitals;
3. Measurement maniacs – these companies measure many financial, operational and behavioral metrics daily and weekly, with transparency, frequent feedback and the alignment of measurements and rewards;
4. They have a highly engaged workforce with intense loyalty, high retention, and productivity;
5. They are led by passionate home-grown, humble leaders who are intimately involved on daily basis in the details of operations and
6. They are technology and execution champions.

It is contended that the financial model OGI illuminates the best high growth companies and the high organic growers amongst them with 7 conservative tests that meet academic and statistical standards.

According to Penrose (1959), the mechanism and rate of organic growth relates to the process of business expansion due to increasing overall customer base, increased output per customer or representative, new sales or any combination of the above as opposed to mergers and acquisitions, which are representative of inorganic growth. Growth including foreign exchange, but excluding divestitures and acquisitions is often referred to as core growth. Sustainability of growth can be established by breaking down organic sales growth into that coming from market growth and that coming from gains in market share.

Hess (2007) contends that the search for 'non acquisitive growth' and the paucity of consistent high organic growth companies raises fundamental questions concerning the quality or character of earnings. They question the equality of all types of earnings – are organic growth earnings more representative of the company's underlying vitality and sustainability than one time transitory or non-recurring earnings created by either accounting elections, valuations,

reserves, currency gains, financial engineering, related party transactions, investments or serial acquisitions.

Stern (2013) articulates that economic value added (EVA) is the "invisible hand" which can lead Managers and workers to create wealth for themselves and in doing so enrich owners. EVA is an economic profit measured as the difference between net operating profit after taxation and the opportunity cost of invested capital [measured as weighted average cost of capital (WACC) / Total capital employed]. Alternatively The Accounting Standards Steering Committee (UK) Corporate Report (1975) amplifies that value added (VA) can be determined as value created by revenue generation free of bought in components and their effects – value reported purely due to the entities efforts exclusively. In this context, value added is deemed to constitute the difference between the monetary value of outputs and inputs of goods and services attributed to the business exclusively. He further contended that doing the best for the shareholders by focusing on earnings per share or other accounting ratios is superseded by the concept of EVA which is a blend of economic theory and real world application.

The change in amount view of growth as contended by Delmar (1997) is in conflict with the organic growth rationale acceptable to the researcher whilst the contributory role of intellectual property rights a non financial input to organic growth as endorsed by McDonald et.al. (2005) is in concurrence with the researcher's perspectives. The role of revenue and earnings and their significance in relation to the growth trajectory is acknowledged.

2.7 The Need for Differentiation in Working Capital Management Practice

Small and medium enterprises segment constitution-wise, may be individuals functioning in business and professions, partnerships running family owned business or small limited liability companies running manufacturing or service based enterprises. Barney (1986) contend SMEs contrast substantially with large entities multi-dimensionally. Inadequate institutional and legal frameworks, non availability and inadequate access to capital markets, reluctance to change, absence of technological orientation, lack of opportunity to attract foreign capital and being dictated to by large corporations are main contrasts. Culture of the organization and operational logistics are distinctly obvious.

According to Kim (2001) integration and application of the explosive new information and computer technology with a view to conceptualizing the design and development of a new generation of support systems intended to advance and assist managerial decision making in working capital and linking the various aspects of working capital with the firm's financial decisions and fixed asset management is clearly absent within the SMEs sector, making their management orientation redundant.

In amplification of the sentiments expressed above Bhattacharya and

Raghavachari (1977) argues that "a SME specific paradigm shift is needed to be discerned and managed pragmatically, and proactively. The 'specific delivery model' should depict professionalism in management; transparency in financial data; adopt better usage of technology and a flexible mind set; adapt to changes whilst maintaining quality to suit global standards as SMEs are not homogeneous entities". Sedera (2009) contend currently many financial analysts rely on traditional financial ratios for assessing the effectiveness of working capital management as they correlate corporate performance in this area with the so called "ideal" ratios; in considering the validity of this practice, classification of companies by size, affectivity levels, factors of working capital management, and determinants of efficiency may signal a contrast to the current practice which emphasizes the organizational performance in relation to current ratios and debt equity relationships. Differentiating SMEs, Collis (www.emeralinsight. com/10.1108) argues that results show that majority of small companies adopt practices that include formal methods of planning and control. Controlling cash and bank relationships remain dominant. Widely used sources of financial information are monthly and quarterly management accounts and cash flow. Utilization of periodic annual accounting based information such as accounting ratios is contingent upon the size of the business and receipt of management advice from Auditors and Accountants.

According to Rafuse (1996) attempts to improve working capital as usual by delaying payments to creditors is counter-productive to SMEs and to the economy as a whole, altering debtors and creditors levels for individual tiers within a value system will rarely produce any net benefit; stock reduction generates system-wide financial improvement and other important benefits – a lean supply chain technique is proposed for the SMEs.

In support of the widely held view that SMEs by nature are different both in the context of financial management and overall structure Brand (2011) opines "From the standpoint of entrepreneurism and the global economy, for people to innovate and really thrive in their own environment, it is absolutely essential that 'regulation' does not unfairly move into the SME segment of enterprise."

Murtagh (2010) argues that one in nine Irish SMEs were unsure of their ability to 'survive' without external investment, thus requiring a differentiated growth agenda alongside a conservation agenda.

"Maturing debt" and hence the need for refinance is intensely urgent in the case of SMEs. According to a report by Deloitte (2011), there will be high levels of competition for capital to refinance more than £ 7 trillion of debt falling due in the next five years. The study examined the debt of more than 9000 large companies in the G 20 and concluded there is a two-tier economy, with a major variation between large cash-rich companies, and growing challenges for SMEs. The highly indebted SMEs need to

address their refinancing requirements sooner rather than later to improve their financial flexibility and boost their liquidity position in a customized manner.

According to Berryman (1983) SMEs have not developed their financial management practices to any great extent, hence mostly owner managers should be made aware of the importance and benefits that can accrue from improved and unique financial management practices. Larsen and Lewis (2007) found that SMEs face different barriers to survival, growth and innovation. Majority of failures of SMEs performance were due to multiple factors such as under capitalization, short-term liquidity problems, insufficient working capital, insufficient startup capital and use of non SME specific working capital management approaches.

Poutziouris *et.al* (1998) are of the view that due to diverse financial as well as non-financial and behavioral factors small businesses rely more heavily on short term funding, and this makes them more sensitive to macro-economic changes. Under such circumstances, business have to strive for more efficient working capital management and especially the management of accounts receivable and payable, which make up the largest proportion of working capital needs in small firms. From a SME perspective Cote *et.al* (1999) explored the limitations of the traditional measures of working capital management and presented alternative measures based on earlier work in the finance literature. They also proposed a new ratio, the "merchandising ratio" which measured the net effect of a firm's working capital management strategy. Filbeck and Krueger (2005) contended that SMEs should be able to reduce financing costs and/or increase the funds available for expansion by minimizing the amount of funds tied up in current assets. They found significant differences in working capital measures between industries across time, and significant changes in these working capital measures within industries across time. Agarwal (1988) formulated the working capital decisions for SMEs as a goal programming problem, giving primary importance to liquidity, by targeting the current ratio and quick ratio. The model included three liquidity goals/constraints and at a lower priority level, four current asset sub-goals and a current liability sub-goal (for each component of working capital). In particular, the profitability constraints were designed to capture the opportunity cost of excess liquidity (in terms of reduced profitability).

In agreement with views expressed by Raghavachari (1977) the researcher opines and supports a SME specific 'paradigm shift' from a working capital management perspective. The absence of the adoption of advanced information technologies, linking of the various aspects of WCM with financing and scientific management of permanent infrastructure is also distinctly agreed upon by the author in regard to SMEs related to the agricultural sector.

3. Conclusions and furtherreseaech

The different viewpoints expressed enables the identification of critical management

practices being adopted and are expected to assist finance managers in identifying areas where they might improve financial performance of their operation. The views expressed provide corporate administrators with information regarding the basic financial management practices adopted by their peers and their respective attitudes towards these practices mostly in a 'generic sense' and is thus totally devoid of customization in accordance with respective sector and industry specifics. The working capital needs of an SME change over time together with its internal cash generation rate. As such, the SMEs should adopt varied analysis 'platforms' and 'ideologies' to ensure a good synchronization of its assets and liabilities.

This study of literature has shown that SMEs to a greater extent have not developed their 'customized' financial management practices to any significant extent in regard to working capital management overall nor its various components of profitability, liquidity and solvency which are usually expected to positively impact on 'organic growth'. On this premise it is difficult to determine the 'hidden champions' amongst the independent variables that generate a favorable impact on the ultimate objective of a maximized organic growth. Thus ascertainment of 'best practice' among SMEs remains a contingency.

Further, this review enables a conclusion that there is a pressing need for further empirical studies to be undertaken on SME financial management, in particular, the association between long term and short term financial architecture and the working capital management practiced by extending the sample size, so as to facilitate an industry-wise analysis which in turn can help to uncover the factors that explain the better performance for some industries and how these best practices could also be applied to other industries. Research outcomes would assist policymakers and educators to identify the requirements of, and specific problems faced by SME sector in Sri Lanka where governments are continually placing more emphasis. Study outcomes should and must come during these opportune times where the government of Sri Lanka is deploying resources to help the SME sector so that it is 'enabled' to positively contribute to the Sri Lankan economy.

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