The Mediating Role of Effective Working Capital Management on the Growth Prospects of Small and Medium Enterprises in Polokwane Municipality

R. Masocha and O. Dzomonda
University of Limpopo

ABSTRACT

The paper assesses the mediating role of effective working capital management on the growth prospects of small and medium enterprises (SMEs) in Polokwane Municipality. SMEs form the backbone of the economies of most countries in the world. Hence growing the number of SMEs in the economy and growing the size of existing ones can go a long way towards achieving South Africa’s developmental needs. Furthermore, improving the growth and sustainability of an SME sector is a remarkable milestone towards solving South Africa’s developmental challenges such as unemployment, poverty and income inequality. The SME sector is an active and vibrant force for economic growth, innovation and job creation for both developed and developing countries. There is consensus among economists and policy makers on the importance of the SME sector as an engine for economic growth. However, SMEs in South Africa continue to fail. This random failure rate casts doubt on this sector’s ability to be a sustainable solution to developmental challenges facing South Africa. This contribution is of the argument that a well designed and implemented working capital management can be a panacea to high failure rate of SMEs in South Africa. This study used a quantitative research methodology with a descriptive research design. 50 SME owner/managers participated in the survey and data was collected through a self-administered questionnaire. Data analysis included descriptive statistics, Pearson Correlation coefficient and the Canonical Correlation Analysis. The Cronbach’s alpha was used to measure reliability of the data collection instrument. The results indicated that SMEs are not effectively managing their working capital. The paper concludes by emphasizing the need for SMEs to effectively manage their working capital as it is the lifeblood of all growing businesses.

Keywords: Working capital management, Developmental challenges, Growth, SMEs, Sustainability, Polokwane.

1. INTRODUCTION

Small and medium enterprises provide an impetus to the economic progress of developing countries (Padachi, 2006). SMEs play a crucial role in local economic development through their job creation capabilities (Javid, 2014). Policy makers, economists and business experts all agree that small and medium enterprises (SMEs) are drivers of economic growth (Mahembe, 2011). On that note, the South African Government has invested in a plethora of initiatives aimed at supporting and growing the SME sector for the past fifteen years (Ramukumba, 2014). SMEs seldom only contribute significantly to the economy, but can also serve as an impetus for economic diversification through their development of new and unsaturated sectors of the economy (Gatt, 2015). According to Jain and Chen (2013), SMEs have a multiplier effect on employment creation as each SME can increase its branches and hence its workforce overtime.

Furthermore, Small Enterprise Development Agency (2012) remarks that an SME sector is a better option than larger firms because they are labour intensive and hence possess a lower capital cost as far as job creation is concerned. Katua (2014) asserts that SMEs improve and enhance access to infrastructure in abandoned rural areas hence stimulating economic activities and improving living standards of the employees and their relatives. Importantly in South Africa SMEs employ the most marginalised groups such as low skilled workforce, women and the youth. Therefore, the potential for SMEs to be pillars of local economic development cannot be underestimated. As indicated by Abor and Quartey (2010), in South
Africa, approximately 91% of the formal business entities are SMEs contributing between 52 to 57% to GDP and 61% to employment.

Regardless of the much documented contribution of SMEs, regrettably SMEs in South Africa continue to fail. According to Fatoki and Garwe (2010), most SMEs in South Africa do not move from the first stage (existence) of growth to other stages such as survival, success, take off and resource maturity. Furthermore, Wallace (2013) reveals that 50% of small businesses fail within the first year and 95% fail within the first 4 years. Ramukumba (2014) remarks that in South Africa SMEs are failing to surpass the projected growth target for required job creation due to a plethora of challenges. Most SMEs fail due to the inability to effectively manage their working capital (Nyamao, Patrick, Martin, Odondo & Simeyo, 2012; Uwonda, Okello & Okello, 2013).

In most cases SME owners pay less attention towards managing their working capital or sometimes neglect it totally resulting in insolvency (Sunday, 2011). Padachi (2006) and Atrill (2006) concur by asserting that working capital constraints are generally considered as one of the major causes of SME failure. According to Atrill (2006) most SMEs do not have a credit control department and debt collection procedures which makes working capital management a nightmare in their businesses. Bowen, Morara & Mureithi (2009) found debt collection to be a challenging task for most SMEs. Poor working capital management causes the business to struggle and fail. If the business fails to meet the required level of working capital, it may result in the business failing to perform some of its day to day operations. The rate of SME failure can be reduced if SME owner/managers are trained to manage their working capital effectively.

There is limited research about the working capital management and SMEs growth in South Africa. Most studies have been conducted outside South Africa (Nazir & Afza, 2009; Jagongo & Makori, 2013; Kungu, Wanjau, Waititu, & Gekara, 2014). Therefore, this study aims to investigate, the mediating role of effective working capital management on the growth prospects of SMEs in a South African context. As such, the objectives of the study were; to establish the working capital management practices of SMEs, to investigate the impact of working capital on the growth of small businesses in Polokwane Municipality, to determine the ways used by SMEs to manage their working capital. The following hypotheses were pursued in this study:

- \( H_0 \): The management of working capital has a lesser impact on the growth of SMEs.
- \( H_1 \): The management of working capital has a greater impact on the growth of SMEs.
- \( H_0 \): SMEs do not implement effective ways to manage their working capital.
- \( H_1 \): SMEs implement effective ways to manage their working capital.

2. Theoretical Framework

This study is grounded on the Operating Cycle Theory. This theory paves the way to understand working capital management as a field. The Operating Cycle Theory forms a foundation for most studies in working capital management. According to Aminu and Zainudin (2015), Operating Cycle Theory provides a framework to understand the flow in the working capital management from the time raw materials are secured to the time receivables are collected (Richards & Laughlin, 1980). Operating cycle takes into consideration the receivables and inventories related to working capital hence giving a clear information about changes in working capital. Operating Cycle Theory addresses shortfalls of the traditional (static view) approach to working capital management where the current or acid-test ratios were used as solvency indicators.

3. Working Capital Management

Sunday (2011) defines working capital as the proportion of a company’s total capital which is employed in the short term operations. According to Jagongo and Makori, (2013:1), "working capital management is the ability to control effectively and efficiently the current assets and current liabilities in a manner that provides the firm with maximum return on its assets and minimises payments for its liabilities". Working capital management is primarily concerned with the day to day operations rather than long-term business decisions. Nazir and Afza (2009) assert that working capital management is mainly driven by the goal to maintain an optimal balance among each of the working capital components ensuring that a balance is achieved between risk and efficiency. On the same token, Muya and Gathogo (2016) elucidate that working capital management exist to closely monitor the relationship between current assets and current liabilities to avoid problems of insolvency and bankruptcy.
A firm can choose between aggressive and conservative working capital management policy depending on what it aims to achieve (Nazir & Afza, 2009, Kungu, Wanjau, Waititu, & Gekara, 2014). These two policies are chosen after a firm evaluate the risk/return trade-off associated with employing each policy (Mwangi, Muathe & Kosimbei, 2014). The aggressive working capital management policy is a high risk –high return working capital investment and financing strategy while conservative working capital management policy is a low risks and low return strategy. However, a firm can choose to employ both of the policies in order to maintain a satisfactory level of working capital (Charitou, Lois & Christoforou, 2016).

The composition of working capital depends on a variety of factors such as operating level, level of operating efficiency, inventory policies, book debt policies, technology used and nature of the industry (Padachi, 2006). Firms can achieve optimal management of working capital by making the trade-off between profitability and liquidity. The typical components of working capital that need to be managed include cash, accounts receivable, inventory, accounts payable and short term debt (Nyamao et al., 2012; Charitou, Lois & Christoforou, 2016). As indicated by Padachi (2006), SMEs need to embark on different working capital management practices to attain success. These will be discussed below.

3.1 Stock or Inventory Management Practices

Inventory relates to goods or other items owned by a firm for sale or for processing before being sold, as part of a firm’s operations. A firm’s profitability and growth depends on the successful sale of its product or service while for non-service businesses, sufficient inventories must be available to meet demand (Maysami, 2009). Ross et al. (2008) identify the Economic Order Quantity model as an effective tool to determine the optimal inventory levels. The Economic Order Quantity model takes into account the inventory carrying costs, inventory shortage costs and total costs helps in the determination of the appropriate inventory levels to hold. According to Nyamao et al. (2012:5809), "maintaining optimal inventory levels reduces the cost of possible interruptions or of loss of business due to the scarcity of products, reduces supply costs and protects against price fluctuations."

3.2 Receivables Management Practices

Receivables represent unpaid credit extended to customers by the business (Aminu & Zainudin, 2015). Firms should employ policies that enable them to closely monitor their receivables. A combination of shortened creditor’s collection period, low levels of bad debts and a sound credit policy improves the performance of a firm. Though it is healthy for a business to have receivables, Nyamao et al. (2012) advise SMEs to maintain an optimal level of debtors lest they suffer from costs associated with bad debts, managing credit among others. Moles, Parriso and Kidwell (2011) advise that it is very important for firms to consider the credit rating of a customer before granting credit to avoid bad debts.

3.3 Cash Management Practices

Cash management is the process of planning and controlling cash flows into and out of the business, cash flows within the business, and cash balances held by a business at a point in time (Pandey, 2004). Cash includes cash in hand and deposits repayable on demand with any bank or financial institution. According to Maysami (2009), cash is needed for transaction purposes, for example payment of raw material sand taxes. Cash management helps firms to remain liquid and be able to meet day to day obligations. Furthermore, additional cash is also necessary to take advantage of special bargains such as supplier clearance sales of raw materials. Cash is the life blood of SMEs hence its management should be prioritised. Cash can be managed effectively and efficiently through the use of cash flow budgets and financial ratios such as monitoring the current ratio and acid test ratio.

3.4 Cash Conversion Cycle (CCC)

Charitou et al. (2016) define cash conversion cycle as the sum of days of sales outstanding (average collection period) and days of sales in inventory less days of payables outstanding while Nobanee (2006) define the concept as the measure of the effectiveness of working capital management that puts into consideration all the cash flows associated with inventory, accounts receivable and accounts payables. According to Aminu and Zainudin (2015), the cash conversion cycle is calculated as follows: \( CCC = ACP + ICP - APP \) Where, \( ACP = \) Average collection period, a proxy for receivable management \( ICP = \) Inventory conversion period, a proxy for inventory management \( APP = \) Average
payment period, a proxy for payables. Firms should always aim to have a shorter CCC period if they are to maintain a healthy liquidity position (Temtime, 2016). However, as indicated by Bei and Wijewardana, (2012), the length of the CCC depends on whether the firm adopted an aggressive or conservative policy of working capital management.


SMEs Akinwande (2010) and Gul et al. (2013) asserts that good working capital management improves the growth of SMEs. The management working capital is crucial to the financial health of SMEs. Jagongo and Makori (2013) concur by advising that firms should effectively manage their working capital lest they risk bankruptcy and failure. Alagathurai (2013) remarks that working capital management is important as it have a bearing on the firm’s liquidity and profitability which are crucial components for business sustainability. Working capital is the life blood of all businesses; hence SMEs need to maintain an optimal level of it to meet their day to day obligations as they pursue growth (Padachi, 2006; Atseye, Ugwu & Takon, 2015).

Effective working capital management forms a crucial component of well performing and growth oriented firms (Jagongo, & Makori, 2013; Knauer & Wöhrmann, 2013). According to Qazi, Shah, Abbas and Nadeem (2011) since liquidity and profitability are both essential objectives for any firm, a balance should always be maintained as over prioritising on one ignoring the later can result in serious problems. Muya and Gathogo (2016) strongly believe that effective working capital management sets a step towards firm success and growth as sufficient levels of working capital can allow a firm to expand its operations. Effective working capital management can assist SMEs to be financially independent. Padachi (2006) warns that since SMEs face challenges in accessing long term financing, they have to effectively manage the little finance provided by the owner or generated by the business lest they face demise. For SMEs to reach their projected growth goal they need to seriously manage their working capital (Uwonda, Okello, & Okello, 2013). Having cash at hand helps SMEs to take advantage of cash discounts therefore saving cash for expanding their operations. Atseye et al. (2015) assert that there is a direct relationship between SME growth and working capital.

5. Methodology

This paper utilised the quantitative research methodology with a descriptive research design. Data was collected through the use of self-administered questionnaire in a survey. Closed ended questions were used where respondents were limited to respond to a set of answers provided in the questionnaire. The questionnaire was adapted from extant literature. 50 SMEs participated in the survey. The participants in the study were owner/managers of SMEs in Polokwane Municipality. The parliament of the republic of South Africa (1996) quantitatively defines an SME as a business with (1) total full-time equivalent of paid employees less than 200 (2) total annual turnover of less than R50 million and (3) total gross fixed assets value (fixed property excluded) of less than R5 million. The above definition of an SME helped to set the boundaries to identify the respondents. The random sampling technique was utilised in the study. A pilot study was conducted on 10 SMEs to ensure face and content validity on the questionnaire. This enabled the researcher to make a few important changes on the questionnaire. The questionnaire consisted of two parts: (1) the biographical questions and (2) questions related to working capital management. Data analysis included descriptive statistics, Pearson Correlation coefficient and the Canonical Correlation Analysis. The Cronbach’s alpha was used to measure reliability.

6. Results and Discussion

One hundred and twenty questionnaires were distributed to owners/managers of SMEs in Polokwane Municipality and fifty questionnaires were returned. The response rate was forty-two percent. As for the biographical information, the results showed that 63% of the respondents were males while 37% were females. Also the results indicated that majority of the SME owner/managers fall in the 25-40 age groups. Considering educational levels most respondent (56%) had matric as their highest qualification followed by 40% possessing tertiary education. Majority of SME owner/managers indicated that they have been in business for a period of between 2-5 years.

6.1 Descriptive Statistics: Analysis of Working Capital Management

6.1.1 Impact of Working Capital on Growth of SMEs

The primary objective of this study was to investigate the impact of working capital on the growth of SMEs in Polokwane Municipality. As indicated by the results
presented in Figure 1 below, 79% strongly agreed while 21% agreed that effective management of working capital contributes to business growth and success. This is consistent to studies such as Atseye et al. (2015) who indicated that there is a direct relationship between SME growth and working capital. Working capital is the life blood of all businesses; hence SMEs need to maintain an optimal level of it to meet their day to day obligations as they pursue growth (Padachi, 2006; Atseye, Ugwu & Takon, 2015).

6.1.2 Amounts of Working Capital
The respondents were asked to rank the extent to which their firms kept adequate amounts of working capital such as debtors, cash and inventory. Respondents were asked to indicate from a scale ranging from 1 “satisfactory level of working capital component” to 7 “non-satisfactory level of working capital management component”. Most respondents indicated that they kept satisfactory levels of debtors.

From Table 1 below, 4% of the respondents ranked their level of inventory 2, while 52% of the respondents indicated that they rarely kept satisfactory levels of cash. This shows that SMEs do not always have enough cash as a working capital component in their businesses. This tallies with similar studies such as (Bowen et al., 2009; Uwonda et al., 2013). On the study by Bowen et al. (2009), 55% of the respondents noted that debt collection was a serious challenge for SMEs. This explains the point by Uwonda et al. (2013) why SMEs always face cash flow problems. This make them to fail since it will be difficult to trade.

6.1.3 The Management of Working Capital
In this survey, 94% of the respondents indicated that they manage working capital on their own, 4% indicated that their working capital is managed by their employees and 2% indicated that it is their friends who manage their business’s working capital. Majority of the respondents agreed that they do not hire accounting experts to manage their working capital. This can be shown by Figure 2 on the following page.

This is consistent with studies by Sunday (2011) and Atrill (2006), who point out that SMEs do not care about their working capital as indicated by absence of standard credit policies in their businesses.

**Figure 1: Impact of working capital on growth of SMEs.**

**Table 1: Components of working capital.**

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debtors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>inventory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors
6.2 Inferential Data Analysis

This section employed Pearson Correlation coefficient and the Canonical Correlation Analysis to test the hypothesis of the study.

6.2.1 The Impact of Working Capital on Growth of SMEs

The first null hypothesis states that the management of working capital has a lesser impact on the growth of SMEs.

As shown by Table 2, there is a positive association (r=0.298; p=0.04) between the impact of the level of debtors kept by a firm and the variables that cause slow business growth. There is also a significant positive association (r=0.531; p=<0.0001) between the impact of excessive working capital on growth of SMEs and the amount of inventory kept by the firm. Furthermore, the correlation coefficient analysis indicates that there is a positive association between the effects of too much working capital and effective management of working capital. Therefore, from the above results the null hypothesis (H0) was rejected and the alternative hypothesis (H1) that the management of working capital has a greater impact on the growth of SMEs.

From Table 3 on the next page, the probability level is 0.012 which is less than 0.05 and this lead to the

<table>
<thead>
<tr>
<th>Eff Mgt</th>
<th>Impctoo</th>
<th>Impwkd</th>
<th>impactwc</th>
<th>impawi</th>
<th>slogr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eff Mgt</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impctoo</td>
<td>0.150</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impwkd</td>
<td>0.098</td>
<td>-0.032</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>impactwc</td>
<td>-0.135</td>
<td>-0.300</td>
<td>0.201**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>impawi</td>
<td>-0.088</td>
<td>-0.101</td>
<td>0.359*</td>
<td>0.531**</td>
<td></td>
</tr>
<tr>
<td>slogr</td>
<td>0.078</td>
<td>0.165</td>
<td>0.298*</td>
<td>-0.208</td>
<td>1</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Source: Authors
rejection of the null hypothesis at 95% confidence level. The alternative hypothesis is supported which states that the management of working capital has a greater impact on the growth of SMEs.

6.2.2 Second Hypothesis Analysis

The second null hypothesis states that SMEs do not implement effective ways to manage their working capital. This hypothesis was tested based on the following variables: the management of working capital, planning of working capital, need for too much working capital, and the need for effective management of working capital. This hypothesis was tested using Canonical Correlation as indicated on Table 4.

Using the Canonical Correlation Analysis, the null hypothesis which states that SMEs do not implement effective ways to manage their working capital is not rejected at 95% confidence level. The p-value of 0.661 on table 4 above is greater than 0.05 which led to the non-rejection of the null hypothesis at 95% confidence level. The R-squared of 10% shows a weak positive association between the implementation of effective ways of management of working capital. The Wilks' Lambda of 0.852 is close to 1 which means that the Canonical Correlation is not statistically significant. The alternative hypothesis which states that SMEs implement effective ways to manage their working capital was totally rejected.

7. Conclusion and Recommendations

This study aimed at investigating the mediating role of effective working capital management on the growth prospects of SMEs in Polokwane Municipality. Effective working capital management sets a step towards firm success and growth as sufficient levels of working capital can allow a firm to expand its operations. In addition, it was discovered that maintaining a positive liquidity position helps SMEs to take advantage of cash discounts therefore saving cash for expanding their operations. As indicated from the findings majority of SMEs are neglecting working capital management practices which augment failure. Most of the respondents indicated that they do not have guidelines and well documented policies to help them manage their working capital. An important observation made from the study is that SME owner/managers lack financial management skills, which is why they do not effectively manage their working capital. As this sector is important to the economy, concerned bodies such as the government, need to provide training facilities to this sector. The paper concludes by emphasizing the need for SMEs to effectively manage their working capital as it is the lifeblood of all growing businesses. The failure rate of SMEs continues to rise in South Africa. The extent literature indicated that the failure is somewhat attributed to ineffective management of working capital by SMEs. Worryingly the results indicated that SMEs still neglect the art of working capital management. Attached to that, the researcher found lack of financial management knowledge and skill as the main factor why SMEs do not actively embark on working capital management. The following recommendations are suggested.

The government is challenged to provide training facilities to SMEs to bridge the documented financial management skills gap. Furthermore, SMEs should be encouraged to embrace efficient working capital
management practices as a strategy to improve their liquidity and future growth prospects. On that note, SMEs owner managers are recommended to put in place credit policies, learn budgeting techniques, and master the art of cash conversion cycle to avoid following into insolvency and bankruptcy. Lastly, SME owner managers are encouraged to enrol for certificates or diplomas in financial management to enhance efficiency on how they manage their working capital or alternatively they should recruit employees with financial management skills.

REFERENCES


