IMPACT OF RECEIVABLES AND PAYABLES MANAGEMENT ON THE PROFITABILITY OF SMEs IN TANZANIA

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ABSTRACT

A well designed and implemented receivables and payables management is expected to contribute positively to the SMEs profitability. The purpose of this paper is to determine the impact of average collection period and average payment period on SMEs profitability in Tanzania. The study is carried out using dependent variable as gross operating profit and independent variables as average collection period and average payment period employing relevant information of 38 Tanzanian SMEs, for the period from 2006 to 2011. This study employed Regression analysis to determine the impact of average collection period and average payment period on gross operating profit taking current ratio, size of the firm, financial debt ratio as control variables. The results indicate that there is a significant negative relationship between average collection period and profitability. Positive relationship is observed between average payment period and gross operating profit. The relationship between two control variables viz; current ratio, financial debt ratio and gross operating profit indicate the expected negative relationship whereas the firm size indicate unexpected negative relationship which may be due to gaps in managerial performance.

KEYWORDS: Receivables management, Payables management, Average collection period, Average payment period, SMEs Profitability.

1.0 INTRODUCTION

Small businesses are viewed as an essential element of a healthy and vibrant economy in developing countries. 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 Medium-Sized Enterprises (SMEs) are believed to provide a momentum to the economic progress of developing countries and its importance is gaining widespread recognition. In Mauritius the SMEs occupy a central place in the economy, accounting for 90% of business stock (those employing up to 50 employees) and employing approximately 25% of private sector employees (Wignaraja and O’Neil, 1999). Since the working capital constitute a major share and significant position, its management plays a pivotal role in the efficient functioning of SMEs. Most of the SMEs for
their working capital funds depend on short term financing like bank loans over drafts etc. 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, 1984; Pike and Pass, 1987).

The most important components of working capital are the receivables and payables. Effective management of receivables and payables facilitates to increase the size of the business activities by increasing total sales consequently increasing recycling of funds and generating higher profitability. As against this, if management fails, it results into long average collection period (ACP) and average payment period (APP), leading to reduced recycling of funds, ultimately effecting profitability and liquidity of the enterprises. A well-managed enterprise normally keeps average collection period normally lesser than average payment period so as to minimize investment in receivables and also honor its short time obligations on time minimizing cost of funds. A large number of business failures have been attributed to inability of business managers to plan and control properly the ACP and APP of their respective firms. In Tanzania very little have been done concerning receivables and payables management practices in SMEs. Keeping this in view and wider recognition of the potential contribution of SME sector to the economy of Tanzania, it motivates to attempt a study on receivables and payables management in Tanzania.

The purpose of this study is to provide an econometric impact of average collection period and average payment period on gross operating profits of SMEs in Tanzania. The paper deals with presentation of an overview of Tanzania, role of SMEs sector in Tanzania, review of the empirical literature, Methodology in terms of sample size, data source, variables used, measurement of variables and estimation techniques. It also presents analysis and results of the study, conclusion and suggestion for improvement and scope for future research.

1.1 AN OVERVIEW OF TANZANIA AND THE ROLE OF SMEs

Tanzania is located in the eastern part of Africa, in the east it is bordered by the Indian Ocean and to the west it’s bordered by Rwanda, Burundi, and Democratic Republic of Congo. Kenya and Uganda are its northern neighbors, while the southern neighbour is Mozambique. To the southwest there is Zambia and Malawi. The country encircles an area of 947300 square kilometres with a coastline of 1424 kilometres and is a home to some of the largest landmarks, the Kilimanjaro which is the highest mountain in Africa standing at 5895 metres above sea level, lake Victoria – the world’s second largest freshwater lake and lake Tanganyika – world’s second deepest lake. Tanzania is known for its wildlife varieties with over fifteen national parks and game reserves around the country. The country has also abundant supplies of natural resources which include diamonds, coal natural gas, gold and a variety of gemstones. The population of Tanzania is around 41.05 million among which 21.23 million (2009 est) are considered to be labour force. All this makes Tanzania one of the world’s wealthiest nations from a biological point of view. (CIA World fact book)

Despite this wealth, the country is ranked as one of the world’s poorest countries as its population below poverty line recorded at 36% (2002 est), the estimated GDP per capita in 2009 was USD 1400 which is absolutely insignificant compared to that of other member country, South Africa which recorded at USD 10,100 in the same year (CIA Fact book)
1.2. ROLE OF SMEs IN TANZANIA

SMEs in Tanzania contribute significantly to employment creation, income generation and stimulation of growth in both urban and rural areas, in-turn contributing to the development of the country as a whole economically, socially and even politically. It is estimated that about a third of the GDP originates from the SME sector. According to the informal sector survey of 1991, micro enterprises operating in the informal sector engaging 1.7 million small businesses consisted of about 20% of the labor force (3 million people then). Since SMEs tend to be labor intensive, they create employment at relatively low level of investment per job created. Most of unemployed people opt for entrepreneurship which falls in the SME sector utilizing local resources effectively with affordable technology adding value to the resources to the larger extent. SMEs facilitates distribution of economic activities within the economy thus promoting equitable distribution of resources better satisfying limited demands brought about by localized and small markets due to their low fixed and overhead costs. They complement large industries requirement in terms of supplements of raw material and other factors of production.

2.0 LITERATURE REVIEW

This study provides clear meaning of terms and concepts and also reviews the findings of the previous researchers. This helps to clearly identify the gap and therefore justify the need of doing the study on the impact of working capital management on SMEs profitability in Tanzania.

2.1 CONCEPTUAL REVIEWS

CONCEPT OF SMEs: According to the ministry of industry and trade in Tanzania, small businesses are collectively defined under nomenclature SMEs. SME is used to mean micro, small and medium enterprises. It is sometimes referred to as micro, small and medium enterprises (MSMEs). In Tanzanian context micro enterprises are those engaging up to four people in most cases family members or with an investment not exceeding TZS. 5 million, the majority of which fall under the informal sector. Small enterprises are mostly formalized undertakings engaging 5 to 49 employees or with capital investment of TSHs 5 million to TSHs 200 million. Medium enterprises employ about 50 to 99 employees and capital investment from about TZs.200 to 800 million (Tanzania SMEs policy 2002). This definition was used in this work keeping in mind that the population of interest was Tanzania SMEs.

Accounts receivables represent money owed by entities to the firm on the sale of products or services on credit. Average collection period (ACP) is the amount of time that a business holds its accounts receivables (Shin and Soenen 1998). The ACP can be measured in days or months.

Accounts payable is a file or account sub-ledger that records amounts that a person or company owes to suppliers, but has not paid yet i.e. a form of debt sometimes referred as trade payables (Huang et al 2008b). Accounts payment period is the average amount of time that a business holds its accounts payable (Huang et al 2008b). it is a measurement calculating the average amount of time a company uses each dollar of credit available.
2.2 **EMPIRICAL LITERATURE REVIEW**

Management of receivables and payables was found to have a significant impact on profitability in studies from different countries.

Deloof (2003) studied the relationship between average collection period (ACP) and corporate profitability. He used a sample of 1,009 large Belgian non financial firms for a period of 1992 – 1996. By using correlation and regression tests, he found significant negative relationship between gross operating income and ACP of Belgian firms. Based on the study results, he suggested that managers can increase corporate profitability by reducing the ACP.

Garcia – Teruel and Martinez – Solano (2007) collected a panel of 8,872 small to medium sized enterprises (SMEs) from Spain covering a period 1996 – 2002. They tested the effect of average collection period (ACP) on SMEs profitability using the panel data methodology. The results which were robust to the presence of endogeneity, demonstrated that managers could create value by reducing their ACP.

Falope and Ajilore (2009) used a sample of 50 Nigerian quoted non financial firms for the period 1996 – 2005. Their study utilized panel data econometrics in a pooled regression, where time series and cross sectional observations were combined and estimated. They found a significant negative relationship between net operating profit on one hand and the average collection period (ACP) and average payment period (APP) on the other hand for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange.

Mathuva (2009) examined the influence of receivables and payables management on corporate profitability by using a sample of 30 firms listed on the Nairobi stock exchange (NSE) for the periods 1993 to 2008. He used Pearson and Spearman’s correlations, the pooled ordinary least square (OLS), and the fixed effects regression models to conduct data analysis. The key findings of his study were: i) there exist a highly significant negative relationship between the ACP and Profitability; ii) there exist a highly significant positive relationship between the APP and profitability.

3.0 **METHODOLOGY**

In this section, the sample size and data source, Key research variables, variable measurements, estimation techniques used for this study are presented.

3.1 **SAMPLE SIZE AND DATA SOURCE**

The study sample included thirty eight (38) SMEs from two prime regions of Tanzania. It includes 18 SMEs from Morogoro region and 20 SMEs from Dar es Salaam region. Data was obtained from the financial statements of the selected SMEs for a period of five years from 31st March 2006 to March 2011. Apart from annual reports, required relevant data is sourced from websites.
3.2 KEY RESEARCH VARIABLES

The key variables used in identifying the impact of receivables and payables management on profitability of SMEs of Tanzania include average collection period, average payment period, gross operating profit, current ratio, firm size and financial debt ratio. The independent variables are average collection period and average payment period and dependent variable is gross operating profit. The remaining are control variables. The type, expected coefficient sign and rationale or relationship between dependent and independent and control variables are shown in the following table followed by explanation of relationships

**TABLE 3.1: KEY VARIABLES AND THE EXPECTED IMPACT ON GROSS OPERATING PROFIT (GOP)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Expected coefficient</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average collection period (ACP)</td>
<td>Independent variable</td>
<td>Negative</td>
<td>ACP↑⇒GOP↓</td>
</tr>
<tr>
<td>Average payment period (APP)</td>
<td>Independent variable</td>
<td>Positive</td>
<td>APP↑⇒ GOP↑</td>
</tr>
<tr>
<td>The current ratio (CR)</td>
<td>Control variable</td>
<td>Positive</td>
<td>CR ↑⇒ GOP ↑</td>
</tr>
<tr>
<td>Firm size (FS)</td>
<td>Control variable</td>
<td>Positive</td>
<td>FS ↑⇒ GOP ↑</td>
</tr>
<tr>
<td>Financial Debt Ratio (FDR)</td>
<td>Control variable</td>
<td>Positive</td>
<td>FDR↑⇒GOP ↑</td>
</tr>
</tbody>
</table>

**INDEPENDENT VARIABLE**

An independent variable is the variable which the researcher has control over, what he/she can choose and manipulate. It is usually what the researcher think will affect the dependent variable. In some cases, the researcher may not be able to manipulate the independent variable. It may be something that is already there and is fixed, something he/she would like to evaluate with respect to how it affects something else, the dependent variable. In this study the independent variables are the Average collection period (ACP) and Average payment period (APP)

**DEPENDENT VARIABLE**

A dependent variable is what the researcher measures in the experiment and what is affected during the experiment. The dependent variable responds to the independent variable. It is dependent because it “depends” on the variations in independent variable. In this study the gross operating profit ratio (GOP) is used as the measure of Profitability of the firm and therefore it is the dependent variable in the study. The reason for using this variable is because the study aimed to associate the company’s operating ‘success’ or ‘failure’ with an operating ratio and relate this variable with other operating variables.
CONTROL VARIABLES

A control variable is the variable that is held constant in order to assess or clarify the relationship between two variables. A control variable is not the independent variable in an experiment but it may affect the outcome of an experiment. It refers to the variable that is fixed or eliminated in order clearly identify the relationship between an independent variable and a dependent variable. In this study the following variables were controlled in order to come up with valid data.

The current ratio (CR) is a financial ratio that measures whether or not a firm has enough resources to pay its debts over the accounting period. It compares a firm’s current assets to its current liabilities. If current liabilities exceed current assets (the current ratio is below 1), then the company may have problems meeting its short term obligations. If the current ratio is too high, then the company may not be efficiently using its current assets or its short term financing facilities. This may also have impact on firm’s profitability, and therefore it must be controlled to avoid it from impairing the study. Financial debt ratio (FDR) is a financial ratio that indicates the percentage of a company’s assets that are provided via debt (Deloof, 2003). Firm size in this study referred to amount of sales of the firm, and it was represented by the natural logarithm of sales.

3.3 VARIABLE MEASUREMENTS

The following are the measures pertaining Inventory management and SMEs profitability:

Average collection period (in days) = (average Accounts Receivables/Sales) x 365

Average payments period (in days) = (Average Accounts Payables/Cost of Goods Sold) x 365

Firm Size = Natural Logarithm of Sales

Financial Debt Ratio = (Short-Term Loans + Long-Term Loans)/Total Assets

Current Ratio = Current Assets/Current liabilities

GOP = (Sales - Cost of Goods Sold) / (Total Assets - Financial Assets)

3.4 ESTIMATION TECHNIQUE (REGRESSION ANALYSIS)

Regression model is used to predict one variable (dependent variable) from one or more other variables (independent variables). In this part the researcher presented the empirical findings on the relationship between average collection period average payment period and profitability of the Tanzanian SMEs on . To investigate the impact of average collection period and average payment period on profitability, the model used for the regressions analysis is expressed generally as

GOP = f (ACP, APP, CR, FS, FDR,)

In the above general equation the GOP is the dependent variable and it is influenced by the independent variables i.e. ACP, APP, CR, FS and FDR.

**REGRESSION MODEL**

ACP – Average collection period influences the GOP in a negative way i.e. as the number of days increases, the GOP decreases and the vice versa is true. In this model the ACP coefficient was negative (-ve)

APP – Average payment period influences the GOP in a positive way i.e. as the number of days increases, the GOP also increases and the vice versa is true. The APP coefficient was positive

\[
\text{GOP} = \alpha_0 + \alpha_1 \text{CR}_i + \alpha_2 \text{FS}_i + \alpha_3 \text{FDR}_i + \alpha_4 \text{ACP}_i + \alpha_5 \text{APP}
\]

Where

\(\alpha_0, \alpha_1, \alpha_2, \alpha_3, \alpha_4\) and \(\alpha_5\) are regression parameters which stand for the coefficients of the independent variables

CR is the current ratio

FS is the firm size

FDR is the financial debt ratio

The subscript “i” denotes number of observations and the subscript “t” denotes the number of years i.e. 5 years.

**4.0 PRESENTATION OF FINDINGS**

The variables were calculated using balance sheet (book) values. The book value was used because the firms did not provide any market value related to the variables that were used in this study. In addition, the measurement of profitability could only be based on income statement values, not on so called market values. The explanatory variables are all firm specific quantities and there is no way to measure these variables in terms of their market value. And also when market values are considered in such studies, the knowledge of the date for which the market value refers becomes unsolvable challenge. This is rather subjective; hence book values were put into the use. The findings are enumerated from two points of view a) descriptive analysis in terms of mean, standard deviation and correlations and b) applying multiple regressions (OLS).

**4.1. DESCRIPTIVE ANALYSIS**

In order to give basic idea about the variables used in this study their descriptive analysis in terms of mean, standard deviation, variance, range, minimum and maximum values of the data collected for the period from 2006 to 2011 relating to 38 SMEs are presented in the following table.
### TABLE 5.1: DESCRIPTIVE STATISTICS OF VARIABLES (2006-2011)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Range</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOP</td>
<td>38</td>
<td>1.38</td>
<td>0.07</td>
<td>1.45</td>
<td>0.6932</td>
<td>0.34529</td>
<td>0.119</td>
</tr>
<tr>
<td>ACP</td>
<td>38</td>
<td>232.42</td>
<td>1.18</td>
<td>233.60</td>
<td>65.9274</td>
<td>59.51356</td>
<td>3541.864</td>
</tr>
<tr>
<td>APP</td>
<td>38</td>
<td>364.62</td>
<td>0.48</td>
<td>365.10</td>
<td>93.8024</td>
<td>85.46713</td>
<td>7304.630</td>
</tr>
<tr>
<td>CR</td>
<td>38</td>
<td>19.45</td>
<td>0.06</td>
<td>19.51</td>
<td>4.6392</td>
<td>6.04419</td>
<td>36.532</td>
</tr>
<tr>
<td>FDR</td>
<td>38</td>
<td>2.14</td>
<td>0.00</td>
<td>2.14</td>
<td>0.6163</td>
<td>0.49987</td>
<td>0.250</td>
</tr>
<tr>
<td>SIZE</td>
<td>38</td>
<td>6.12</td>
<td>15.94</td>
<td>22.06</td>
<td>19.1642</td>
<td>1.57545</td>
<td>2.482</td>
</tr>
</tbody>
</table>

Source: compiled from the information of annual reports run on SPSS

The following observations can be made from the table which was prepared on the basis five year data from 2006-2011 for 38 SMEs.

- The GOP of 38 SMEs ranges between 0.07 and 1.38 with mean of 0.6932 and standard deviation of 0.34529 indicating high variance.

- ACP ranges between 1.18 and 233.60 days with an average of 65.9274 and standard deviation of 59.5135 signifying very high variability across 38 SMEs.

- APP ranges between 0.48 and 365.10 days with an average of 93.8024 and standard deviation of 85.46.13 signifying very high variability across 38 SMEs.

- The CR ranges between 0.06 and 19.51 with an average of 4.6392 and standard deviation of 6.04419 showing very higher variability in short term obligations repayment ability.

- The FDR ranges between nil and 2.14 with an average of 0.6163 and standard deviation of 0.49987. It signifies high variance in the financing pattern of the studied SMEs.

- The average size of SMEs recorded the logarithm of sales at 19.17 with a range of 15.94 and 22.06, standard deviation of 1.57545. It also shows significant variance but not like other variables.

The above analysis concludes that all the 38 SMEs, though size wise comparatively not with high variance, the other selected variables are varying significantly as their standard deviations, ranges are significantly higher. The high variance is normally related with managerial decisions and efficiency in execution of their policies.
5.2 CORRELATION BETWEEN VARIABLES

An attempt is made here to find the relationship between the variables used in this study employing Pearson’s Coefficient of correlation analysis. As stated in review of literature, if ACP comparatively decreases over a period of time it enables higher turnover in sales and increase in GOP hence the expected relationship should be negative. Also the correlation between GOP and APP is positive; this implies that when the firm’s APP decreases it will also cause similar effect on profitability. This so because the firm has to pay back the creditors quickly which involve certain cost of funds consequently decreases profits. In addition the relationship between GOP and control variables as well as ACP, APP and control variables is also calculated. This is because change in ACP and APP impacts control variables like CR, FDR and SIZE. The calculated relationship between these variables along with control variables is presented in the following table.

TABLE 5.2: CORRELATION BETWEEN ACP, APP, CONTROL VARIABLES AND GOP

<table>
<thead>
<tr>
<th></th>
<th>GOP</th>
<th>ACP</th>
<th>APP</th>
<th>CR</th>
<th>FDR</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOP</td>
<td>1.000</td>
<td>-0.176</td>
<td>-0.051</td>
<td>-0.130</td>
<td>0.294</td>
<td>-0.089</td>
</tr>
<tr>
<td>ACP</td>
<td>1.000</td>
<td>0.748</td>
<td>0.336</td>
<td>-0.063</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>APP</td>
<td>1.000</td>
<td>0.336</td>
<td>-0.063</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td>-0.542</td>
<td>0.008</td>
</tr>
<tr>
<td>FDR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td>-0.063</td>
</tr>
<tr>
<td>SIZE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: compiled from the information of annual reports and run on SPSS

From the analysis of the above table the following observations can be made:

1. The correlation between ACP and GOP is -0.176, this shows that decrease in ACP is resulting into increase in GOP and vice versa. This is as per the expected relationship.

2. The correlation between APP and GOP is -0.051, this shows that decrease in GOP is resulting into increase in APP and vice versa. This implies that when the firm’s profitability decreases also its ability to pay creditors in short time decreases and therefore leading to increase in average payment period.

3. The correlation between ACP and CR is -0.290, this shows that decrease in ACP is resulting into increase in CR and vice versa.
4. The correlation between APP and CR is -0.343, this shows that decrease in APP is resulting into increase in CR and vice versa.

5. The correlation between ACP and FDR is 0.281, this indicates that when ACP decreases, the FDR decreases and vice versa.

6. The correlation between APP and FDR is 0.336, this indicates that when APP decreases, the FDR decreases and vice versa.

7. The correlation between ACP and SIZE is -0.220, which indicates that decrease in ACP is resulting into increase in SIZE and vice versa.

8. The correlation between APP and SIZE is -0.175, which indicates that increase in SIZE is resulting into decrease in APP and vice versa.

The relationship between all the variables is in expected form except in the case of APP and GOP which is negative instead of positive. This may be due extraordinary variability of APP period across 38 SMEs. The very high variability coupled with negative relationship between APP and GOP indicate that SMES need to employ managerial efficiency.

5.3 MULTIPLE REGRESSIONS ANALYSIS

In this section, the empirical findings on the relationship between average collection period (ACP) average payment period (APP) and profitability of the Tanzanian SMEs which are arrived by employing multiple regression. As the other reviewed researchers’ findings stated, if ACP comparatively decreases over a period of time the GOP would increase, therefore the expected relationship should be negative. If the APP increases also the profitability would increase, therefore the expected relationship should be positive. The relationship between GOP and control variables as well as ACP and APP with control variables was calculated using multiple regressions. The calculated relationship between these variables along with control variables is presented in the following table.

**TABLE 5.3: OLS REGRESSION ESTIMATES ON IMPACT OF ACP AND APP ON GOP**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.221</td>
<td>.728</td>
<td>1.678</td>
<td>.103</td>
<td>.430</td>
</tr>
<tr>
<td>ACP</td>
<td>-0.002</td>
<td>.001</td>
<td>-.367</td>
<td>-1.503</td>
<td>1.43</td>
</tr>
<tr>
<td>APP</td>
<td>0.0003</td>
<td>.011</td>
<td>.076</td>
<td>.306</td>
<td>.761</td>
</tr>
<tr>
<td>CR</td>
<td>-0.001</td>
<td>.011</td>
<td>-.018</td>
<td>-.090</td>
<td>.929</td>
</tr>
<tr>
<td>FDR</td>
<td>0.244</td>
<td>.134</td>
<td>.354</td>
<td>1.821</td>
<td>.078</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.03</td>
<td>.036</td>
<td>-.134</td>
<td>-.813</td>
<td>.422</td>
</tr>
</tbody>
</table>

Source: compiled from the information of annual reports and run by SPSS
The following observations can be made from the table:

1. The coefficient of ACP was negative (-0.002). This implied that when the ACP decreases by 1 day then the profitability increases by 0.2%.

2. The coefficient of APP was positive (0.0003). This implies that when the APP increases by 1 day then the profitability will increase by 0.03%. However its impact is very low.

3. The regression coefficient of CR was -0.001, which implies that an increase in CR by 1 is associated with a decrease in profitability by 0.1% and vice versa. However the influence of CR on GOP (profitability) is low.

4. The coefficient of FDR in the regression was 0.244 which implies that an increase in FDR by 1 is associated with an increase in profitability by 24.4%. In other way round, when the FDR decreases by 1 then the profitability decreases by 24.4%.

5. The regression coefficient of SIZE was -0.03, which implies that an increase in SIZE by 1 is associated with a decrease in profitability by 3% and vice versa. However this is an unexpected relationship which may be due to the inefficiency of SMEs resources management.

6. The VIF ranged from 1.056 to 2.399, starting from SIZE = 1.056, FDR = 1.472, CR = 1.487, ACP=2.326 to APP = 2.399. This implied that each variable had some correlations with other independent variables. The tolerance range from 0.417 to 0.947, where APP = 0.417, ACP = 0.430, CR = 0.673, FDR = 0.679 and SIZE = 0.947. This implies that there was no problem of multicollinearity because this problem is observed when the tolerance is less than 0.1.

7. The regression equation is:

\[
\text{GOP} = 1.221 - 0.03\ln S + 0.244\text{FDR} + 0.001\text{CR} - 0.002\text{ACP} + 0.0003\text{APP}
\]

In this multiple regressions other tests were used; the R square test (R^2) and the F-test. The R^2 found to be = 0.179, which implies that the impact of ACP, APP and the control variables included in the model was only 17.9%, the rest 82.1% of the impact on GOP was due to other factors out of the model. The t – test shows that the linearity between independent and dependent variables is not existing as all the values fall in reject areas.

### 5.0 CONCLUSIONS AND SUGGESTIONS

Previous researches predicted negative relationship between ACP and SMEs profitability. The results of this research are in line with the previous findings on the relationship between ACP and GOP. The findings indicate that ACP has an inverse relationship with SMEs profitability i.e. when the ACP days increase the profitability of firm’s decreases and vice versa. These results complied with those from studies by Deloof (2003), Garcia-Teruel and Martinez-Solano (2007), Mathuva (2009) and Falope and Ajilore (2009) who found negative relationship between ACP and profitability of firms.
However the previous findings on APP with GOP were contradictory, while Mathuva found that there was positive relationship between APP and GOP, Falope and Ajilore (2009) found a negative relationship between APP and GOP. The results in this study concurred with Mathuva’s findings.

Finally the firm size, current ratio and financial debt ratio are the variables which appear in the regression model as control variables. In the regression model it was found that, the firms’ profitability as measured by GOP has a positive relationship with financial debt ratio. This implied that profitability increases with increase in financial debt ratio. Furthermore in this study the relationship between the firm size and GOP was negative which is not supposed to be. The relationship between current ratio and the GOP was negative.

Though the results identified relation between ACP and GOP and APP and GOP it was not so strong. Further APP is more than ACP which is welcoming sign as it may contribute to profits but may also affect the credit worthiness. This can also be evinced from the fact that though the ACP is around 66 days its range is between 1day and 233 days. Similarly though the APP is 94 days it is ranging between half day and 365 days. Weak relationship between variables coupled with high variability denotes lack of effective management in receivables and payables. This calls for the effective managerial intervention.

**SUGGESTIONS FOR IMPROVEMENT**

The lack of knowledge in financial management is the persistent problem facing owner managers of SMEs, which was endorsed by many studies, is yet to be addressed by the government. On the other hand, owner managers must ensure that they utilise adequate receivables and payables management tools like turnover ratios, APP and ACP. Proper financial management education and training facility initiated by government and financing bodies may help them to address the problem of receivables and payables management. The managements should concentrate on reducing the present ACP of more than 2 months so as to improve the financial performance. They should also concentrate on reducing the high variability in ACP and APP so as to assure more profitability.

**6.0. SCOPE FOR FURTHER RESEARCH**

Since this study is confined for only two variables of the working capital; ACP and APP and their impact on profitability, it may be extended to all the variables of working capital and profitability of SMEs covering sample from all the regions of Tanzania. Future research may be extended to investigate generalization of the findings of all regions of the Tanzanian SMEs and also beyond Tanzanian SMEs covering entire Africa. The scope of further research may be extended to other working capital components including inventories, marketable securities and Cash conversion cycle management and to the different sectors such as Manufacturing, trading, service and agriculture. Further more the scope should be extended to industries like food processing, milling, poultry and even farming just to mention some of them.
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